Schedule 2 contains the following:

- General Notes to Export Policy Goods under Restrictions
- Schedule 2 Export Policy
- Appendix 1 List of Wild Life Entries in Wild Life (Protection) Act, 1972
- Appendix 2 List of flora included in Appendix I (Prohibited Species)& Appendix (endangered species) II of CITES
- Appendix 3 List of SCOMET items
- Appendix 4 Definition of Finished Leather

General Notes to Export Policy – Goods under Restrictions

1. Free Exportability

All goods other than the entries in the export licensing schedule along with its appendices are freely exportable. The free exportability is however subject to any other law for the time being in force. Goods not listed in the Schedule are deemed to be freely exportable without conditions under the Foreign Trade (Development and Regulations) Act, 1992 and the rules, notifications and other public notices and circulars issued there under from time to time. The export licensing policy in the schedule and its appendices does not preclude control by way of a Public Notice Notification under the Foreign Trade (Development and Regulations) Act, 1992.

Goods listed as "Free" in the Export Licensing Schedule may also be exported without an export licence as such but they are subject to conditions laid out against the respective entry. The fulfillment of these conditions can be checked by authorized officers in the course of export.

2. Code does not limit the item description

The export policy of a specific item will be determined mainly by the description and nature of restriction in the schedule. The code number is illustrative of classification but does not limit the descriptio by virtue of the standard description of the item against the code in the import part of the ITC(HS) classification.

3. Classes of Export Trade Control

A. Prohibited Goods

The prohibited items are not permitted to be exported. An export licence will not be given in the normal course for goods in the prohibited category. No export of rough diamond shall be permitted unless accompanied by Kimberley Process (KP) Certificate as specified by Gem & Jewellery EPC (GJEPC).

B. Restricted Goods

The restricted items can be permitted for export under licence. The procedures / conditionalities wherever specified against the restricted items may be required to be complied with, in addition to the general requirement of licence in all cases of restricted items.

C. State Trading Enterprises

Export through STE(s) is permitted without an Export Licence through designated STEs only as mentioned against an item and is subject to conditions in para 2.11 of Foreign Trade Policy 2009-14.

D. Restrictions on Countries of Export

- (i) Export of Arms and related material to Iraq shall be prohibited.
- (ii) Direct or indirect export of all items, materials, equipments, goods and technology which could contribute to Iran's enrichment related, reprocessing or heavy water related activities, or to development of nuclear weapon delivery systems including those listed in INFCIRC/254/Rev.9/Part 1 and INFCIRC/254/Rev.7/Part 2 (IAEA Documents) and items listed in S/2010/263 (UN Security Council Document) or any items related to nuclear and missile development programmes is prohibited. All the UN Security Council Resolutions/Documents and IAEA Documents referred to above are available on the UN Security Council website (www.un.org/Docs/sc) and IAEA website (www.iaea.org).
- (iii) Direct or indirect export of following items, whether or not origninating in Democratic People's Republic of Korea (DPRK), to DPRK is prohibited:

All items, materials equipment, goods and technology including as set out in lists in documents S/2006/814, S/2006/815 (including S/2009/205), S/2009/364 and S/2006/853 (United Nations Secruty Council Documents) INFCIRC/254/Rev.9/Part 1a and INFCIRC/254/Rev.7/Part 2a (IAEA documents) which could contribute to DPRK's nuclear-related, ballistic missile-related or other weapons of mass destruction-related programmes.

- (iv) Export of rough diamonds to Cote d'Ivoire is prohibited in compliance to Paragraph 6 of UN Security Council Resolution(UNSCR) 1643 (2005).
- (v) Export of rough diamond [ITC (HS) Code 710210, 710221 or 710231) to Venezuela shall be

Prohibited in view of voluntary separation of Venezuela from the Kimberley Process Certification Scheme (KPCS). No Kimberley Process Certificate shall be accepted / endorsed / issued for export of rough diamond to Venezuela.

(vi) In addition to above, export to other countries will be subject to conditions as specified in Para 2.1 of the Foreign Trade Policy 2009-14 and Para 2.2 of the Handbook of Procedures 2009-2014 (Vol. I) and other conditions which may be listed in the title ITC (HS) Classification of Export and Import items.

Schedule 2 - Export Policy

Notes

1. The schedule below has six columns. The column name and the description are:

Column No.	Column Name	Description			
1.	Entry No.	Gives the order of the main entry in the schedule. The column is designed for easy reference and gives the identity of the raw covering the set consisting of Tariff Item Code, Unit Item description export policy and Nature of restriction along with the connected Licensing Note and Appendix.			
2.	Tariff Item (HS) Code	This is an eight digit code followed in the import policy in the earlier part of the book, customs and the DGCIS code. The first two digits give the chapter number, the heading number. The last two digits signify the subheading. The six digit code and product description corresponds exactly with the six digit WCO (World Customs Organisation). The last digits are developed in India under the common classification system for tariff item.			
3.	Unit	The second column gives the unit of measurement or weight in the tariff item, which is to be used in shipping bill and other documents. In most cases, the unit is given as "u" denoting number of pieces.			
4.	Item Description	The item description against each code gives the specific description of goods, which are subject to export control. This description does not generally correspond with the standard description against the code. In most cases, the description will cover only a part of standard description.			
5.	Export Policy	This column is for the general policy regime applicable on the item. Generally, the Export Policy is one of the following.			
		Prohibited Not permitted for Export Licence will not be given in the normal course			
		Restricted Export is permitted under a licence granted by the DGFT STE Export allowed only through specified State Trading Enterprises (STEs) subject to specific conditions laid out in the FTP and also Para 2.11 of the Import and Export Policy			
6.	Nature of Restriction	This column specifies the special conditions, which must be met for the export of goods in the item description column. The column may also give the nature of restriction under the broad category in the Export Policy column.			

Table-A

Goods falling in more than one Chapter of ITC (HS) Classification

Note 1

(i) The term "Wild Animal" and Animal Article would have the same meaning as defined in the Wild Life (Protection) Act, 1972.

S.No.	Chapter	Item Description	Policy	Nature of Restriction
1	0106 0208	All wild animals, animal articles including their products and	Prohibited	Not permitted to be exported.
	0200	derivatives excluding those for		
	0300	which ownership certificates have		
	0407	been granted and also those required		
	0408	for transactions for education,		
	0410	scientific research and management		
	0502	under Wild Life (Protection) Act,		
	0504	1972 including their parts and		
	0505	products.		
	0506			
	0507 0508			
	0508			
	0510			
	0510			
	1504			
	1506			
	1516			
	1517			
	1518			
	1600			
2	3000 Deleted vi	de notification no 12/(2004 2000) New	Dallai datad 2	1 12 2004
2 3	50, 51,	de notification no.13/(2004-2009) New Dress materials/ready made	Restricted	Exports permitted under
5	50, 51, 52, 54,	garments fabrics/textile items with	Restricted	licence.
	55, 60,	imprints of excerpts or verses of the		neenee.
	61, 62,	Holy Quran		
	63			
4	Any	Military stores as specified by	Free	No Objection Certificate from
	Chapter	Director General of Foreign Trade		the Department of Defence
				Production and Supplies,
				Ministry of Defence, New
				Delhi, except the goods as
				specified at Export Licensing
				Note 1 below which are freely
				exportable without the No Objection Certificate.
5	28, 29,	Special Chemicals, Organisms,	Prohibited/	Exports governed as per the
	30, 35, 35, 35, 35, 35, 30, 35, 30, 35, 30, 35, 35, 35, 35, 35, 35, 35, 35, 35, 35	Materials, Equipments &	Restricted/	conditions indicated in
	36, 37,	Technologies (SCOMET) goods as	Free	Appendix-III of this schedule.
	38, 39,	specified in Appendix 3 of this		Further where no specific
	40, 48,	schedule of this book		conditions as at category 2 to 7
	49, 59,			are enumerated, licence shall
	69, 70,			be required.
	71, 72 to			

	91, 93			
6.	Any Chapter	Samples/ Exhibits of goods included in Schedule 2 of this book	Free	Samples/exhibits of goods including those in Schedule 2 of this book, except all prohibited items, and all items specified in Appendix-3 to Schedule 2 (SCOMET) , restricted items, and items in Chapter 29, 93 and 97
7	Any Chapter	Any other item whose exports are regulated by Public Notice issued by the Director General of Foreign Trade in this behalf	Free	Subject to conditions as notified in the respective Public Notice
8	All Chapters	All Items	Prohibited/ Restricted/ Free	Export of goods including plant & plant products using wood packaging material such as pellets, dunnage, crating, packing blocks, drums, cases load boards, pellet collars and skids etc. shall be allowed subject to compliance of ISPM- 15.

Export Licensing Note of Table A

1. The following goods as military stores are freely exportable without a No Objection Certificate from Department of Defence Production and Supplies in the Ministry of Defence.

- 1. Tents, their parts and accessories.
- 2. Articles of Uniform, clothing, footwear and beddings.
- 3. Hand Tools all Types.
- 4. Cooking Utensils all types.
- 5. Stove oil wickless, Lamp Incandescent and Lanterns, Hurricanes, Fabricated Metal stores namely Safe Meat and Milk, Boxes ice, Bedstead Camp Officer, Table-Steel & Wooden, Chair Camp Officer.
- 6. Hospital equipment and stores all types including all type of Dressings.
- 7. Brushes of sorts made out of Bristle and Natural Fibre.
- 8. Packaging Material all types excluding ammunition boxes.
- 9. Engineering Equipment, as follows:

K.M. Bridge Floats for KM Bridge Boat Asault Universal Type (BAUT) Crash Fire Tenders Bailey Bridge

10. Heating and Lighting Equipment, Camp Stores & Furniture as follows;

Heating Space coal Burning

- Heater Space Oil Burning
- 11. Leather Items, as follows
- (a) Brief Cases
- (b) Gloves (Industrial & Boxing)

- (c) Leather Bags
- (d) Leather Bags
- (e) Straps, Belts & Pouches
- 12. Optical Instruments, as follows
- (a) Binocular Prismatic 8x30 (Wide Angle)
- (b) Compass Prismatic Liquid MK 3A
- (c) Monocular Prismatic 6x30
- 13. Miscellaneous, as follows
- (a) Banner Radar Response
- (b) Barrel 200 ltr Type `A'
- (c) Cable Telephones of various types
- (d) Candle sink QD Mk III
- (e) Canopy & rear curtain assembly
- (f) Canopy body vahan 1 Ton Nisan
- (g) Canopy vehicular body for Tata 6.5 Ton
- (h) Cape Food handles
- (i) Chagul Universal Mk II
- (j) Cover Blanketing Tank Mule Mk IV
- (k) Cover Water Proof of sizes varying from 0.5 x 4.5 Mtr to 9.1 x 9.1 Mtr.
- (1) Deployment bag for BP MiG 23 Aircaraft
- (m) Droue withdrawal line
- (n) Ground Sheet Lt Wt OG
- (o) Landing Mechanised
- (p) Lowering line for kiron Aircraft Target
- (q) Lt Wt web Eqpt Belt Waist Med
- (r) Main Paulin
- (s) Schacle Chain 1525m
- (t) Sling Rifle Web
- (u) Stretcher Amblulance Mk2
- (v) Tank Canvas Water's type 230 ltr Body and Cover Mk 1
- (w) Tank Fabric collapsible 6140 ltr Body MK 3 (Size 3660 x 50 mm)
- (x) Tarpaulin cover
- (y) Jacket Combat Disruptive (ICK)
- (z) Jacket Combat Grill disruptive
- (zi) Jacket sleeping cotton
- (zii) Jacket Men's DBPL/WI BRTA Black Modified
- (ziii) Liner Men's Woolen 'V' Neck OG
- (ziv) Liner Parka Men's improved PATT
- (zv) Matters Kapok Mk II Group with cover Small & Large

Table - B

Goods Falling Within Specific Chapters of ITC (HS) Classification

Chapter 1

Live Animals

Note 1 The term "Cattle" covers cows, oxen, bulls and calves

Note 2 Export of wild animals and their products as defined in Wild Life (Protection) Act, 1972 including their part prohibited. See restrictions in Part A for details.

Note 3 Germplasm of cattle is classified in heading 0511

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
9	0101 10 00	u	Live Horses –	Restricted	Exports permitted under
	0101 90 90		Kathiawari, Marwari and		licence.
			Manipuri breeds		
10	0102 10 10	u	Live Cattle and buffaloes	Restricted	Exports permitted under
	0102 10 20				licence.
	0102 10 30				
	0102 10 90				
	0102 90 10				
	0102 90 20			D	
11	0106 19 00	u	Camel	Restricted	Exports permitted under licence
12	0106 31 00	u	Live exotic birds except	Prohibited	Not permitted to be
	0106 32 00		the following species of		exported
	0106 39 00		exotic birds, policy of which is indicated against each		
13	0106 32 00	u	(i) Albino budgerigars	Free	Subject to pre-shipment inspection
14	0106 32 00	u	(ii) Budgerigars	Free	Subject to pre-shipment inspection
15	0106 39 00	u	(iii) Bengali finches	Free	Subject to pre-shipment inspection
16	0106 39 00	u	(iv) White finches	Free	Subject to pre-shipment inspection
17	0106 39 00	u	(v) Zebra finches	Free	Subject to pre-shipment inspection
18	0106 39 00	u	(vi) Jawa sparrow	Restricted	Exports permitted under license.
					A certificate from the Chief Wildlife warden of the concerned State from where exotic birds (Jawa Sparrow) have been procured to the effect that

	the birds to be exported are from Captive Bred Stock. Exports if allowed shall be subject to pre-
	shall be subject to pre- shipment inspection and CITES certificate.

Chapter 2

Meat and Edible Meat Offal

Note 1

Beef includes meat and edible offal of cows, oxens and calf

Note 2

Offal includes heart, liver, tongue, kidneys and other organs.

Note 3

The export of chilled and frozen meat shall be allowed subject to the provision specified to the gazette notification on raw meat (chilled and frozen) under Export (Quality Control and Inspection) Act, 1963. Offals of buffalo too are subject to the same conditions of quality control and inspection. Laboratories duly recognized by APEDA, as well as in-house laboratories attached under the abattoirs cum meat processing plant registered with APEDA and Agency approved labs, may also be used to conduct the necessary tests for confirmation of quality under the supervison of the designated veterinary authority of the State. On the basis of these test and inspections carried out by Veterinarians, duly registered under the Indian Veterinary Council Act, 1984, employed by the exporting unit and supervised by the designated veterinary authority of the state, the veterinary Health Certificate may be issued by the designated authorities of the state.

Note 4

Export of canned meat products shall be subject to preshipment inspection either by the State Directorate of Animal Husbandry or Export Inspection Agency or Directorate of Marketing and Inspection Government of India or Muncipal Corporation of Delhi (MCD) in accordance with either the standards prevalent in the exporting country or standards prescribed under the Meat Food Products Order, 1973 under Export (Quality Control and Inspection) Act, 1963 or orders made thereunder

Note 5

Exports of gonads and other reproductive organs of buffaloes and the germplasm of cattle and buffaloes in heading 0511 require an export licence.

Note 6

Export of meat and meat products will be allowed subject to the exporter furnishing a declaration, attached with copies of valid APEDA Plant Registration Certificate(s) to the customs at the time of export that the above items have been obtained / sourced from an APEDA registered integrated abattoir or from APEDA registered integrated abattoir/abattoir. (The stipulation that raw material for export of meat & meat products must be sourced exclusively from APEDA registered abattoir/integrated abattoir will come into effect on 15.06.2012.

Note 7

On the cartons for export of meat, the following details shall compulsorily be mentioned:-

- (i) Name of the Product.
- (ii) Country of Origin
- (iii) APEDA Plant Registration No.
- (iv) Name of the exporter.

Note 8

The designated veterinary authority of the State where meat processing unit is located, may issue the certificate on the baisis of the inspections carried out by Veterinarians duly registred under the Indian Veterinary Council Act 1984 employed by the exporting unit and supervised by the designated veterinary authority of the State. The Inspection Fee prescribed under the Export of Raw Meat (Chilled/Frozen) (Quality control and Inspection) Rules, 1992 shall continue to be paid by the exporting unit to the Agency as currently applicable.

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
19	0201 10 00 0201 20 00 0201 30 00 0202 10 00 0202 20 00 0202 30 00	kg	Beef of cows, oxen and calf	Prohibited	Not permitted to be exported
20	0201	Kg	Meat of buffalo (both male and female) fresh and chilled.		
	0201 10 00		Carcasses and half carcasses	Prohibited	Not permitted to be exported.
	0201 20 00		Other cuts with bone in.	Prohibited	Not permitted to be exported
	0202		Meat of buffalo (both male and female) frozen		
	0202 10 00		Carcasses and half carcasses	Prohibited	Not permitted to be exported.
	0202 20 00		Other cuts with bone in	Prohibited	Not permitted to be exported.
21	0201 30 00 0202 30 00	Kg	Boneless meat of buffalo (both male and female) fresh and chilled Boneless meat of buffalo (both male and female) frozen	Free	 Export allowed on production of a certificate from the designated veterinary authority of the State, from which the meat or offals emanate, to the effect that the meat or offals are from buffaloes not used for breeding and milch purposes. Quality control and inspection under Note 3 and 4 respectively as

22	0204 10 00 0204 21 00 0204 22 00 0204 23 00 0204 30 00	Kg	Meat of Indian sheep	Free	well as condition stipulated at Note 6 and 8 above are required to be fulfilled. Quality control and inspection under Note 3 and 4 respectively as well as condition
	0204 41 00 0204 42 00 0204 43 00				stipulated at Note 6 above are required to be fulfilled.
23	0204 50 00	Kg	Meat of Indian Goat.	Free	Quality control and inspection under Note 3 and 4 respectively as well as condition stipulated at Note 6 above are required to be fulfilled.
24	0206 10 00 0206 21 00 0206 22 00 0206 29 00 0210 20 00	kg	Beef in the form of offal of cows, oxen and calf	Prohibited	Not permitted to be exported
25	0206 10 00 0206 21 00 0206 22 00 0206 29 00 0210 20 00	kg	Offal of buffalo except gonads and reproductive organs	Free	 Export allowed on production of a certificate from the designated veterinary authority of the State, from which the meat or offals emanate, to the effect that the meat or offals are from buffaloes not used for breeding and milch purposes. Quality control and inspection under Note 3 and 4 respectively as well as condition stipulated at Note 6 and 8 above are required to be fulfilled.
26	0206 80 10 0206 90 10	kg	Offal of Indian sheep	Free	Quality control and inspection under Note 3 and 4 respectively as well as condition stipulated at Note 6 above are

					required to be fulfilled.
27	0206 80 10 0206 90 10	kg	Offal of Indian Goat	Free	Quality control and inspection under Note 3 and 4 respectively as well as condition stipulated at Note 6 above are required to be fulfilled.

Chapter 3

Fish and Crustaceans, Molluscs and other Aquatic Invertebrates

Note 1

The term "Marine Products" in this Chapter covers all the eight digit Exim Codes in the Chapter of the ITC(HS) Classification of Export and Import items. All marine species that have been included in the Schedules of the Wild Life (Protection) Act, 1972 are prohibited for exports and other species listed in CITES are subject to the provisions of the CITES.

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
28	0300 00 00	Kg	Marine species and products except the following	Free	Subject to preshipment quality inspection as may be specified by the Government through a notification
29	0300 00 00	Kg	Those species (and their parts, products and derivatives) mentioned in the Schedules of the Wild Life (Protection) Act, 1972.	Prohibited	Not permitted to be exported.
30	0302 69 30 0303 79 50	Kg	Fresh or Chilled or Frozen silver pomfrets of weight less than 300 gms.	Restricted	Exports permitted under licence.
31	0303 79 99	Kg	Beche-de-mer	Prohibited	Not permitted to be exported <i>irrespective of its</i> size.
32	0306 11 00 0306 12 10 0306 12 90 0306 21 00 0306 22 00	Kg	Lobsters except undersized (\$) rock lobster and sand lobster variety below	Free	
33	0306 11 00 0306 21 00	kg	Rock Lobster: Panulirus polyphagus 300 gm as whole chilled live or frozen, 250 gm as whole cooked; 90 gm as tail	Prohibited	Not permitted to be exported
34	0306 11 00 0306 21 00	kg	Panulirus homarus 200gm as whole live, chilled or frozen, 170 gm as whole cooked, 50 gm as tail	Prohibited	Not permitted to be exported

35	0306 11 00 0306 21 00	Kg	Panulirus Ornatus 500gm as whole live/chilled or frozen; 425 gm as whole cooked; 150gm as tail	Prohibited	Not permitted to be exported
36	0306 12 10 0306 12 90 0306 22 00	kg	Sand Lobster: Thenus orientalis 150 gm as whole; 45 gm as tail	Prohibited	Not permitted to be exported

Export Licensing Note of Chapter 3

Note 1

A consignment/ lot is considered to be undersized if it contains specified species any piece of which has a weight less than that indicated against the species or has been processed out of or obtained from individual pieces of the species weighing less than the minimum weight indicated against the species.

Note 2

"as tail" means without head.

Chapter 4

Dairy produce; bird's eggs; natural honey; edible products of animal origin, not elsewhere specified or included

Note 1 The expression "milk" means full cream milk of partially or completely skimmed milk

Sl. No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
37	04090000	Kg	Natural Honey	Free	 Export of honey to USA and European Union (EU) shall be allowed subject to the following conditions: 1. Honey exported shall be 'wholly obtained' Indian origin honey only, and; 2. No blending of Indian honey shall be permitted with honey originating from any other country."
38	0402		Milk and Cream, concentrated or containing added sugar or other sweetening matter including skimmed milk powder, whole milk powder, dairy whitener and infant milk foods	Prohibitied	Not permitted to be exported

Note 1

Transitional arrangements under para 1.5 of Foreign Trade Policy, 2009-14 shall not be applicable on export of milk powders(including skimmed milk powder, whole milk powder, dairy whitener and infant milk foods.

Note 2

Export consignments of milk powders (including skimmed milk powder, whole milk powder, dairy whitener and infant milk foods), which were handed over to customs for examination and export on or before 18.02.2011 will be allowed for export.

Note 3

Export of 1600 MTS of Milk Powder per annum to Bhutan (as per Calendar year i.e. 1st January to 31st December) will be exempted from any export ban.

Chapter 5

Products of Animal Origin

Note 1 Export of wild animals and their parts and products as covered in Wild Life (Protection) Act, 1972 and CITES are prohibited and other species listed in CITES are subject to the provisions of the CITES. See restrictions in Table A for detail.

S.No	Tariff Items HS Code	Unit	Item Description	Export Policy	Nature of Restriction
39	0506 10 49 0511 99 99	Kg	Human skeletons	Prohibited	Not permitted to be exported.
40	0506 10 19 0506 10 29 0506 10 39 0506 10 49 0506 90 19 0506 90 99 0511 99 99	Kg	Bone and bone products (excluding bone meal), horn and horn products, (excluding horn meal), hooves and hoof products (excluding hoof meal) when exported to European Union.	Restricted	 Export to EU allowed subject to the following conditions; (i) A 'Shipment Clearance Certificate' is to be issued consignment-wise by the CAPEXIL indicating details of the name and address of the exporter, address of the exporter, address of the registered plant, IEC No. of the exporter, plant approval number, nature of export product, quantity, invoice number & date, port of loading (Name of the port) and destination. (ii) After the shipment is made,the exporter shall also provide a 'Production Process' certificate and/or health certificate to the buyer consignment-wise to be issued by CAPEXIL as per the requirement of EU.
41	0506 10 19 0506 10 29 0506 10 39 0506 10 49 0506 90 19	Kg	Bone and bone products including Ossein intended to be used for Human consumption, meant for European Union.	Restricted	Export to EU allowed subject to the following conditions;- (i) A 'Shipment Clearance Certificate' is

	0506 00 00				4 h
	0506 90 99				to be issued consignment-
	0511 99 99				wise by the CAPEXIL
					indicating details of the
					name and address of the
					exporter, address of the
					registered plant, IEC No.
					of the exporter, plant
					approval number, nature
					of export product,
					quantity, invoice number
					& date, port of loading
					(Name of the port) and
					destination.
					(ii) After the shipment is
					made, the exporter shall
					also provide 'Health
					Certificate' consignment-
					wise to the buyer giving
					details of vessel name,
					shipping bill number with
					date, production process,
					etc. as per the requirement
					of EU. The Certificate
					would be issued jointly by
					CAPEXIL and Regional
					•
					Officer, Department of
					Animal Husbandry,
					Dairying and Fisheries,
					Ministry of Agriculture,
					Government of India.
42	0505 90 10	Kg	Peacock Tail Feathers	Prohibited	Not permitted to be
		0			exported.
43	0511 99 99	Kg	Handicrafts and articles of	Prohibited	Not permitted to be
-5	0.511 77 77	115	peacock tail feathers	Tomoteu	exported.
11	0506 10 41	V.a.		Drobibited	1
44	0506 10 41	Kg	Shavings of Shed Antlers	Prohibited	Not permitted to be
	0506 10 49		of Chital and Sambhar		exported.
	0507 90 40				
45	0511 99 99	Kg	Manufactured Articles of	Prohibited	Not permitted to be
			shavings of shed antlers of		exported.
			chital and sambhar		_
46	0508 00 20	Kg	Sea shells, including	Free	Export permitted freely
	52 00 00 D 0	8	polished sea shells and		-r r
			handicrafts made out of		
			those species not included		
			in the Schedules of the		
			Wild Life (Protection)		
			Act, 1972.		
47	0508 00 30	Kg	Sea shells, including	Free	Export to be governed by
		-	polished sea shells and		CITES Regulations.
			handicrafts made out of		
			those species included in		
			CITES		
			(Excluding the species		
			mentioned in Schedules of		
		1	mentioned in Schedules of	1	

48	0508 00 50	Kg	the Wild Life (Protection) Act, 1972). Sea shells, including polished sea shells and handicrafts made out of those species included in the Schedules of the Wild Life(Protection) Act, 1972.	Prohibited	Not permitted to be exported
49	0511 99 91 0511 99 99 3001 10 91 3001 10 99 3001 20 90 3001 90 99	Kg	Gonads and other reproductive organs of buffaloes	Restricted	Exports permitted under licence.
50	0511 10 00 0511 99 91 0511 99 99 3001 10 91 3001 10 99 3001 20 90 3001 90 99	Kg	Germplasm of cattle and buffaloes	Restricted	Exports permitted under licence.

Export Licensing Note of Chapter 5

Note 1

The handicrafts made out of bone and horn products as finished products and not exported for further processing and not intended for human or animal consumption are not covered under at S. No. 35 and 36 of this Chapter.

Chapter 6

Live Trees and other Plants; Bulb, Roots and the Like; Cut Flowers and Ornamental Foliage

Note 1

Planting material of a kind used for propagation and classified in heading 0601 and heading 0602 are subject to restriction on export. See chapter 12 for detail. Certain plants like cashew plants too are restricted for exports. The detail of this too is in Chapter 12.

Chapter 7 Edible Vegetables and Certain Roots and Tubers

Note 1 Reference to onions in this chapter includes onions fresh or chilled frozen, provisionally preserved or dried.

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
51	0703 10 10 0712 20 00	Kg	Onion (all varieties expect Bangalore rose onions and Krishnapuram onions) excluding cut, sliced or broken in powder form.	STE*	Export permitted subject to Minimum Export Price (MEP) notified by DGFT and other conditions laid down by DGFT from time - to – time.
52	0703 10 10 0712 20 00	Kg	Bangalore rose onions and Krishnapuram onions excluding cut, sliced or broken in powder form	STE*	Export permitted subject to Minimum Export Price (MEP) notified by DGFT and other conditions laid down by DGFT from time - to – time.
53	0712 20 00	Kg	Onions (of all varieties) in cut, sliced- or broken in powder form.	Free	

* List of State Trading Enterprises (STEs) for export of onion.

- (i) National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED)
- (ii) Maharashtra State Agricultural Marketing Board (MSAMB)
- (iii) Gujarat Agro Industries Corporation Ltd. (GALC)
- (iv) The Spices Trading Corporation Ltd. (STCL)
- (v) The A.P. State Trading Corporation
- (vi) The Karnataka State Co-operative Marketing Federation Ltd. (KSCMF)
- (vii) The National Co-operative Consumers Federation of India Ltd., (NCCF)
- (viii)The North Karnataka Onion Growers Co-operative Society (NKOGCS)
- (ix) West Bengal Essential Commodities Supply Corporation (WBECSC) Ltd., Kolkata
- (x) M.P. State Agro Industries Development Corporation ((MPSAIDC), Bhopal
- (xi) Karnataka State Produce Processing and Export Corporation (KAPPEC), Bangalore
- (xii) Madhya Pradesh State Co-operative Oil Seeds Growers Federation Ltd.,

(xiii) The Andhra Pradesh Marketing Federation (AP MARKFED),

Export Licensing Note of Chapter 7

Note 1

The following conditions will apply to all STEs for export of Onions of all varieties:

(i) The designated STEs can issue NOC to the Associates Shippers and the service charges levied by them for issue of NOC will be at a uniform rate of 1% of the invoice value of export of onion.

- (ii) The STEs are not allowed to levy any other charges except above by way of fees, guarantee or deposits or in any other form whatsoever.
- (iii) The careful selection of exporters is made to eliminate the trading in permits to export onions.
- (iv) The agencies shall ensure that quality of onion is maintained.
- (v) A weekly report of permits issued shall be provided to NAFED which shall act a nodal agency to keep the Government of India informed of the outflow of onions.
- (vi) Periodic reports of the actual shipment of onion by different agencies be submitted to the Department of Consumer Affairs.

Sl. No	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
54	0713 Kg. Dried Leguminous Vegetables, Shelled, whether or not skinned or		Vegetables, Shelled,	Prohibited	Not permitted to be exported.
	0713 10 00	Kg.	Peas (Pisum sativum)	Prohibited	Not permitted to be exported.
	0713 20 00	Kg.	Chickpeas (garbanzos) Beans (Vigna spp., Phaseolus spp.):	Prohibited	Not permitted to be exported.
	0713 31 00	Kg.	Beans of the species Vigna mungo (L.) Hepper or Vigna radiata (L.) Wilczek	Prohibited	Not permitted to be exported.
	0713 32 00	Kg.	Small red (Adzuki) beans (Phaseolus or Vigna angularis)	Prohibited	Not permitted to be exported.
	0713 33 00	Kg.	Kidney beans, including white pea beans (Phaseolus vulgaris)	Prohibited	Not permitted to be exported.
	0713 39		Other :	Prohibited	Not permitted to be exported.
	0713 39 10	Kg.	Guar seeds	Prohibited	Not permitted to be exported.
	0713 39 90	Kg.	Other	Prohibited	Not permitted to be exported.
	0713 40 00	Kg.	Lentils	Prohibited	Not permitted to be exported.
	0713 50 00	Kg.	Broad beans (Vicia faba var major) and horse beans (Vicia faba var equina, vicia faba var minor)	Prohibited	Not permitted to be exported.
	0713 90		Other :	Prohibited	Not permitted to be exported.
	0713 90 10	Kg.	Tur (arhar) Other :	Prohibited	Not permitted to be exported.
	0713 90 91	Kg.	Split	Prohibited	Not permitted to be exported.
	0713 90 99	Kg.	Other	Prohibited	Not permitted to be exported.

Note 2

- (i) The prohibition shall not apply to export of kabuli chana (as is known by different names in different parts of the country) w.e.f. 07.03.2007.
- (ii) The period of validity of prohibition on exports of Pulses (except Kabuli Chana) shall be extended upto 31.3.2013.
- (iii) The transitional arrangements under Para 1.5 of the Foreign Trade Policy, 2004-2009, as amended from time to time, shall not be applicable for export of Pulses.
- (iv) The prohibition shall not be applicable to export of 1000 tonnes of pulses to The Republic of Mauritius by MMTC.
- (v) The prohibition shall not be applicable to export of (i)178.70 tonnes of pulses to Nepal by MMTC.
- (vi) Prohibition imposed vide Para 3 (i) of this Notification shall not apply to export of 1000 MTs of pulses to Bhutan.
- (vii) Export of 60MTS of pulses to the Republic of Maldives permitted (Notifiction No.34 dt.25.03.2010).
- (viii) Export of 60 MTS of puleses to Republic of Maldives through MMTC Ltd permitted

Note 3

The prohibition shall not be applicable to export of pulses to Sri Lanka executed under the specific permission granted by DGFT.

Note 4

The export of 1200 MTS of pulses to Bhutan per annum (as per Calendar year i.e. 1st January to 31st December) will be exempted from any export ban.

Note 5

Export of 10,000 MTS of per annum of Organic pulses and lentils duly certified by APEDA from EDI ports will be permitted. Export contracts should be registered with APEDA prior to shipment.

Chapter 10

Cereals

Note 1 Export of wild variety of wheat and paddy seed is restricted. See chapter 12 for details.

Sl. No	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
55	1006 10 1006 10 90 1006 20 00 1006 30 1006 30 10 1006 30 90 1006 40 00	Kg.	Non Basmati Rice	Free	 Export to be made by private parties from privately held stocks. State Trading Enterprises (STEs) including M/s. NCCF & NAFED are also permitted to export privately held stocks of non- Basmati rice. Export shall be through Custom EDI ports. Export is also permitted through the non-EDI Land Custom Stations (LCS) on Indo-Bangladesh and Indo-Nepal border subject to registration of quantity with DGFT. RAs Kolkata & Patna and such other RAs as notified by DGFT from time to time will be the designated RAs for the purpose of such registration of quantity.
56	1006 10 10	Kg	Rice of seed quality	Free	 Export will be allowed subject to submission of following documents to Customs at the time of export: A license to carry on the business of a dealer in seeds issued under Section 3 of the Seed Control Order (1983) from the State Government; and Declaration that the export consignment of seeds has been chemically treated and is not fit for human consumption; and
					2. Export packets will be labeled that seeds are treated with chemical insecticides and cannot be used for food or feed purposes.
57	1006 30 20	Kg	Basmati Rice (Dehusked (Brown), semi milled, milled both in either par- boiled or raw condition).	Free	 i) Exports allowed subject to registration of contracts with the APEDA, New Delhi; (ii) Export will be subject to Minimum Export Price (MEP) of US \$ 700 per ton FOB or as notified by DGFT from time to time. MEP shall be exclusive of foreign commission;

	(iii) Grain of rice to be exported
	 (iii) Grain of rice to be exported shall be more than 6.61 mm of length and ratio of length to breadth of the grain shall be more than 3.5; (iv) Export of Basmati Rice is permitted through all EDI ports; (v) Exports to European Union permitted subject to pre-shipment quality inspection as may be specified by the Government through a notification; (vi) Exports to Russian Federation permitted subject to pre-shipment quality certification issued by (1) Insecticide Residue Testing Laboratory. (2) Geo-Chem Laboratories Pvt. Ltd. (3) Reliable Analytical Laboratory (4) Arbro Pharmaceuticals Ltd. (5) Shri Ram Institute for Industrial Research, Delhi (6) Shri Ram Institute for Industrial Research, Branch Office Bangalore (7) Delhi Test House; and (8) Vimta Labs. or any other agency as may be notified from time to time." (vii) Exports of empty printed gunny bags with Markings indicating the product being Indian
	Ltd.
	(4) Arbro Pharmaceuticals Ltd.(5) Shri Ram Institute for Industrial
	(6) Shri Ram Institute for Industrial Research, Branch Office Bangalore
	(8) Vimta Labs.
	notified from time to time."
	gunny bags with Markings
	are not permitted except when exported along with the consignments of Basmati Rice, in
	which cases also, the same shall not exceed 2% of the total number of filled gunny bags of Basmati Rice
	being exported; (viii) In case of un-bagged Indian Basmati Rice being exported in bulk
	or in bags of 50 Kgs or above, the exports of empty printed gunny bags with Markings indicating the
	product being Indian Basmati Rice, in whatever manner, shall also be permitted to the extent of actual
	requirements considering the total quantity of the consignment and the sizes of the empty bags being
	exported.

Note 1

The above conditions in respect of export of Non Basmati Rice will not be applicable to exports undertaken as under:

- 1.1 Export of non-Basmati rice (i) under Food Aid Programme and (ii) under bi-lateral trade agreement between Government of India and Government of Maldives shall be permitted.
- 1.2 Export of 21,200 MTs per annum to Bhutan (as per Calender year i.e. from 1st January to 31st December) of non-basmati rice will be exempted from any export ban.

Note 2

Export of 10,000 tons of non-basmati rice to Horn of Africa (Kenya, Somalia and Djibonti) from Central Pool Stock of FCI at economic cost of Rs.20,689.50 per ton will be permitted.

Note 3

Export of 10,000 MTs of organic non-basmati rice per annum duly certified by APEDA prior to shipment from EDI ports will be permitted.

Note 4

Export of 25,000 MTs of non-basmati rice to Nepal permitted through MMTC vide Notification No.33 DT.03.03.2010 will be permitted with a maximum of 25% bropken during KMS 2010-11.

	1	1		i	
58	1006 10 90	Kg	Paddy (of Basmati Rice	Free	a) Export allowed subject to
			in husk)		registration of contracts with the
					APEDA, New Delhi
					b) Export of empty printed gunny
					bags with Marking indicating the
					product being Indian Basmati Paddy,
					in whatever manner, are not
					permitted except when exported
					alongwith the consignments of
					Basmati Paddy, in which cases also,
					the same shall not exceed 2% of the
					total number of filled gunny bags of
					Basmati Paddy being exported.
					c) In case of unbagged Indian
					Basmati Paddy being exported in bulk
					or in bags of 50 Kgs. or above, the
					exports of empty printed gunny bags
					with Markings indicating the product
					being Indian Basmati Paddy, in
					whatever manner, shall also be
					permitted to the extent of actual
					requirements considering the total
					quantity of the consignment and the
					sizes of the empty bags being
					exported.
59	1001 10	Kg	Durum wheat :	Free	Export permitted through Custom EDI
					ports only. Export shall also be
	1001 10 90		Other		permitted through the non-EDI Land
					Custom Stations (LCS) on Indo-
l					

	1001 90		Other		Bangladesh and Indo-Nepal border
	1001 90 20		Other wheat		subject to registration of quantity with DGFT. RAs Kolkata & Patna and such other RAs as notified by DGFT
	1001 90 39		Other		from time to time will be the designated RAs for the purpose of such registration of quantity.
60	100110 10	Kg	Durum Wheat of seed quality	Free	1. Export will be allowed subject to submission of following documents to Customs at the time of export:
					(i) A license to carry on the business of a dealer in seeds issued under Section 3 of the Seed Control Order (1983) from the State Government; and
					(ii)Declaration that the export consignment of seeds has been chemically treated and is not fit for human consumption; and
					2. Export packets will be labeled that seeds are treated with chemical insecticides and cannot be used for food or feed purposes.
61	100190 10	Kg	Wheat of seeds quality	Free	1. Export will be allowed subject to submission of following documents to Customs at the time of export:
					(i) A license to carry on the business of a dealer in seeds issued under Section 3 of the Seed Control Order (1983) from the State Government; and
					(ii)Declaration that the export consignment of seeds has been chemically treated and is not fit for human consumption; and
					2. Export packets will be labeled that seeds are treated with chemical insecticides and cannot be used for food or feed purposes.
62	100190 31	Kg	Meslin of seed quality	Free	1. Export will be allowed subject to submission of following documents to Customs at the time of export:
					(i) A license to carry on the business of a dealer in seeds issued under Section 3 of the Seed Control Order (1983) from the State Government; and
					(ii)Declaration that the export consignment of seeds has been chemically treated and is not fit for

					human consumption; and 2. Export packets will be labeled that seeds are treated with chemical insecticides and cannot be used for food or feed purposes.
63	1005 10 00	Kg.	Maize (corn) Seed quality	Free	 Export will be allowed subject to submission of following documents to Customs at the time of export: (i) A license to carry on the business of a dealer in seeds issued under Section 3 of the Seed Control Order (1983) from the State Government; and (ii)Declaration that the export consignment of seeds has been chemically treated and is not fit for human consumption; and 2. Export packets will be labeled that seeds are treated with chemical insecticides and cannot be used for food or feed purposes.

Sub-heading Note

The term "durum wheat" means wheat of the Triticum durum species and the Hybrids derived from the inter – specific crossing of Triticum durum which have the same number (28) of chromosomes as that species.

Note 1

Export of 5000 MTS of Organic wheat per annum duly certified by APEDA permitted from EDI ports.

Note 2

Export of 2,50,000 MTS of Wheat to Afganistan from central pool stock of FCI permitted up to 31.03.2012.

Note 3

Export of 24,000 MTS of wheat per annum to Bhutan (as per Calendar year i.e. 1st January to 31st December) shall be exempted from any export ban.

Chapter 11

Products of the milling industry; malt; starches; inulin; wheat gluten

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
64	1101	Kg	Wheat Flour (Maida), Samolina (Rava / Sirgi), Wholemeal atta and resultant atta	Free	Export allowed subject to limit of 6.5 lakh MTs between 03.07.2009 and 31.03.2013 and with the condition that export shall be allowed through EDI ports only.

Note 1

Export of the following quantities of wheat flour to Maldives shall be permitted through the PSUs indicated below:

Item	Year	Quantity in MTs	Name of PSU
	2011-12	32,095	MMTC Ltd
Wheat Flour	2012-13	35,304	MMTC Ltd
	2013-14	38,835	MMTC Ltd

Chapter 12

Oils Seeds and Oleginous Fruits; Miscellaneous Grains, Seeds and Fruit; Industrial or Medicinal Plants; Straw and Fodder

Note :- Seeds of all forestry species including Nux Vomica, Red Sanders, Rubber, Russa Grass and tufts, Sandalwood and seeds of tufts, Sandalwood and seeds of ornamental wild variety plants stand restricted for export and shall be allowed under licence and also shall be regulated according to the rules notified under Biological (Diversity) Act, 2002.

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
65	0601 00 00 0602 00 00 1211 00 00	Kg	Seeds and planting materials other than those in the restricted category	Free	Declaration in the form of an affidavit from the exporter that the seed being exported is not Breeder or Foundation or Wild variety seeds with indication the source of procurement
66	1202 10 00	Kg	Groundnuts (Peanuts)	Free	 (a) Export to EU permitted subject to Compulsory registration of contracts with APEDA, alongwith controlled Aflatoxin level certificate given by agencies/laboratories nominated by APEDA; (b) Exports to Russian Federation permitted subject to pre-shipment quality certification issued by (1) Insecticide Residue Testing Laboratory. (2) Geo-Chem Laboratories Pvt. Ltd. (3) Reliable Analytical Laboratory (4) Arbro Pharmaceuticals Ltd. (5) Shri Ram Institute for Industrial Research, Delhi (6) Shri Ram Institute for Industrial Research, Branch Office Bangalore (7) Delhi Test House; and

					(8) Vimta Labs. or any other agency as may be
					notified from time to time.
67	1202 10 10	Kg	Groundnut (of Seed Quality)	Free	(a) Export to EU permitted
07	1202 10 19	Kg	Groundnut (Other)		subject to Compulsory registration of contracts with APEDA, alongwith
	1202 10 91	Kg	Groundnut (Other of		controlled Aflatoxin level certificate
	1202 10 00	17	Seed Quality)		given by agencies/laboratories
	1202 10 99 1202 20 10	Kg Kg	Groundnut (Other) Groundnut (Kernels,		nominated by APEDA;
	1202 20 10	15	H.P.S.)		(b) Exports to Russian
	1202 20 90	Kg	Groundnut (Other)		Federation permitted subject to pre- shipment quality certification issued
					(1) Insecticide Residue Testing
					Laboratory.
					(2) Geo-Chem Laboratories Pvt. Ltd.
					(3) Reliable Analytical Laboratory
					(4) Arbro Pharmaceuticals Ltd.
					(5) Shri Ram Institute for Industrial
					Research, Delhi
					(6) Shri Ram Institute for Industrial
					Research, Branch Office Bangalore
					(7) Delhi Test House; and
					(8) Vimta Labs.
					or any other agency as may be
					notified from time to time.
68	1207 40 10	Kg	Seasame Seeds	Free	 Exports to Russian Federation permitted subject to pre-shipment quality certification issued by (1) Insecticide Residue Testing Laboratory. (2) Geo-Chem Laboratories Pvt. Ltd. (3) Reliable Analytical Laboratory (4) Arbro Pharmaceuticals Ltd. (5) Shri Ram Institute for Industrial Research, Delhi (6) Shri Ram Institute for Industrial Research, Branch Office Bangalore (7) Delhi Test House; and (8) Vimta Labs.

					or any other agency as may be notified from time to time.
69	1001 90 10	Kg	Wheat seeds (wild variety)	Restricted	Exports permitted under licence
70	1006 20 00	Kg.	Paddy seeds (wild variety)	Restricted	Exports permitted under licence
71	0602 20 10 1209 99 90	Kg	Cashew seeds and plants	Restricted	Exports permitted under licence
72	1209 29 90	Kg	Egyptian clover (Barseem) Trifolium alaxtum seeds	Restricted	Exports permitted under licence
73	1209 91 30	Kg	Onion Seeds	Restricted	Exports permitted under licence
74	1209 29 00	Kg	Pepper cuttings or rooted cutings of pepper	Restricted	Exports permitted under licence
75	1209 99 90	Kg	Seeds of all forestry species	Restricted	Exports permitted under licence
76	1209 29 90	Kg	Saffron seeds or corms	Restricted	Exports permitted under licence
77	1211 90 14	Kg	Neem seeds	Restricted	Exports permitted under licence
78	1211 90 00 1211 90 12	Kg	Nux vomica / bark/leaves/roots powder thereof	Restricted	Exports permitted under licence
79	1209 99 10 1209 99 90	Kg	Seeds of all trees (excluding seeds of all forestry species), hedges, ornamental plants and flowers and vegetable seeds other than onion seeds	Free	Exports permitted subject to a declaration in the form of an affidavit from the exporter that the seed being exported is not Breeder or Foundation or Wild variety seeds and indicating the source of procurement.
80	$\begin{array}{c} 0601\ 00\ 00\\ 0602\ 00\ 00\\ 1211\ 00\ 00\\ 0601\ 10\ 00\\ 0601\ 20\ 10\\ 0602\ 10\ 00\\ 0602\ 90\ 20\\ 0602\ 90\ 30\\ \end{array}$		Plants and plant portions of wild origin, of species specified in any of the Schedules of Wild Life (Protection) Act, 1972 or Appendix I of CITES or Export Licensing Note 1	Prohibited	Not permitted to be exported. Special exemption can be granted for the purpose of research, education and life saving drugs on case by case basis by DGFT, on the recommendation of Ministry of Environment & Forests.
81	0602 90 90		Plants and plants portions of cultivation origin of species specified in any of the Schedules of Wild Life (Portection) Act, 1972 or Appendix I of	Free	Subject to production of a Certificate of Legal Possession in favor of the exporter, issued by the DFO having jurisdiction where the exporter is situated. In case of species listed in Schedule VI of Wild Life (Protection) Act, 1972,

			CITES or Export Licensing Note1.		subject to the exporter complying with the provision of S.17A of the Act. In case of species listed in Appendix I of CITES subject registration of the nursery and appropriate CITES documentation from the Asst. Management Authority.
82	0602 90 90		Plants, Plant portions of wild or cultivation origin, of species specified Appendix II or III of CITES.	Free	Subject to production of certificate of Legal Possession in favour of the exporter, issued by the DFO having jurisdiction where the exporter is situated. Export subject to CITES.
83	0602 90 90		Plants, plant portions of wild or cultivation origin, of species not specified in any of the Schedules of Wild Life (Protection) Act, 1972 or Appendix I, II, III of CITES or Export Licensing Note 1.	Free	Subject to obtaining a Certificate of cultivation from District Agriculture Officer or District Horticulture Officer or DFO".
84	3003 40 00 3003 90 11 3003 90 12 3003 90 13 3003 90 14 3003 90 14 3003 90 15 3004 90 11 3004 90 12 3004 90 13 3004 90 14 3004 90 15	kg	Derivatives, extracts and formulations	Free	Subject to the provisions of Wile Life (Protection) Act, 1972 and CITES"
85	1212 20 10 1212 20 90	Kg	Sea weeds of all types, including G-edulis but excluding brown sea weeds and agarophytes of Tamil Nadu Coast origin in processed form	Restricted	Exports permitted under licence.
86	1212 20 90	Kg	Brown sea weeds and Agrophytes excluding G-edulis of Tamil Nadu coast origin in processed form	Free	Exports allowed subject to quantitative ceilings as may be notified by DGFT from time to time

Export Licensing Note of Chapter 12

Note 1

- 1. Baddomes cycad (Cycas beddomei).
- 2. Blue vanda (Vanda coerulea).
- 17. Taxus Wallichiana (Common Yew or Birmi Leaves).
- 18. Aquilaria malaccensis (Agarwood).

- 3. Saussurea costus.
- 4. Ladies slipper orcid (Paphiopedilium species).
- 5. Pitcher plant (Nepenthes Khasiana).
- 6. Red vanda (Renanthera imschootiana).
- 7. Rauvolifia serpentina (Sarpagandha).
- 8. Ceropegia species.
- 9. Frerea indica (Shindal Mankundi).
- 10. Podophyllum hexandurm (emodi) (Indian Podophyllum.)
- 11. Cyatheaceae species (Tree Ferns).
- 12. Cycadacea species (Cycads).
- 13. Dioscorea deltoidea (Elephant's foot).
- 14. Euphorbia species (Euphorbias).
- 15. Orchidaceae species (Orchids).
- 16. Pterocarpus santalinus (Redsanders).

Note 2

- 19. Aconitum species.
- 20. Coptis teeta.
- 21. Coscinium fenestrum (Calumba wood).
- 22. Dactylorhiza hatagirea.
- 23. Gentiana Kurroo (Kuru, Kutki).
- 24. Gnetum species.
- 25. Kampheria Galenga.
- 26. Nardostachys grandiflora.
- 27. Panax pseudoginseng.
- 28. Picrorhiza kurrooa.
- 29. Swertia chirata (Charayatah).

- (i) However, in respect of CITES species, a CITES permit of export shall be required.
- Exports allowed only through the Ports of Mumbai, Nhava Sheva, Kolkata, Cochin, Delhi, Chennai, Tuticorin, Amritsar, Calicut, Thiruvananthapuram, Kandla and Mundra.
- (iii) Except for the documents prescribed above, no additional informations/ NOC/ documents shall be required to be furnished by the Exporter to any authority of State or Central Government.

Note 3

* The term "formulation" used here may include products, which may contain portions / extracts of plants on the prohibited list. Further the term "formulation" shall also include value added formulations as well as herbal ayurvedic, and exports subject to the provisions of CITES or Wild Life (protection) Act, 1972 in case where the formulation contains species listed therein.

Chapter 13

Lac, Gums, Resins and Other Vegetable Saps and Extracts

S.No	Tariff Item HS Code	Unit	Item Description	Expor t Policy	Nature of Restriction
87	1301 10 10 1301 10 20 1301 10 30 1301 10 40 1301 10 50 1301 10 60 1301 10 70 1301 10 80 1301 10 90	Kg	Shellac and all forms of lac	Free	 i) Registration with Tribal Cooperative Marketing Development Federation of India Ltd. or Shellac & Forest Products Export Promotion Council; (ii) Production of quality certificate from Shellac & Forest Products Export Promotion Council.
88	1301 90 16	Kg	Gum Karaya	Free	Registration with Tribal Coperative Marketing Fedreation of India Limited (TRIFED) or Shellac & Forest Products Export Promotion Council (SHEFEXIL), Kolkata.
89	1302 1302 32 20 1302 32 30	Kg.	Guar gum refined split Guar gum treated and pulverized.	Free	Guar gum exports to European Union, originating in or consigned from India and intended for animal or human consumption, allowed subject to issue of Health Certificate by authorized representative of Ministry of Commerce & Industry, Government of India i.e. Shellac & Forest Products Export Promotion Council (SHEFEXIL), Kolkata accompanied by the original analytical report of testing of Penta Chlorophenol (PCP) issued by Vimta Labs, Hyderbad, certifying that product does not cotain more than 0.01 mg per Kg of Penta Chlorophenol (PCP) on sampling done by the authorized representative of the competent authority

Chapter 14

Vegetable Plaiting Materials, Vegetable Products not elsewhere specified or included

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
90	1401 10 00	u	Mulli bamboo (Prohibited	Not permitted to be exported
			Melocanna bacifera)		

Chapter 15

Animal or Vegetable Fats and Oils and their Cleavage Products; Prepared Edible Fats; Animal or Vegetable Waxes

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
91	$\begin{array}{c} 1501\ 00\ 00\\ 1502\ 00\ 10\\ 1502\ 00\ 20\\ 1502\ 00\ 30\\ 1502\ 00\ 90\\ 1503\ 00\ 00\\ 1505\ 00\ 10\\ 1505\ 00\ 20\\ 1505\ 00\ 90\\ 1506\ 00\ 10\\ 1506\ 00\ 90\\ \end{array}$	Kg	Tallow , fat and/or oils of any animal origin excluding fish oil and Lanolin	Prohibited	Not permitted to be exported
92	Codes pertaining to all edible oils under Chapter 15 of Schedule 1		All Edible Oils under Chapter 15 of Schedule 1 of ITC(HS) Classification of Export and Import Items	Prohibited	Not permitted to be exported

Note 1

Restrictions imposed vide this Notification shall not apply to the following:

- (i) Export of Castor Oil,
- (ii) Export of Coconut Oil through Kochi Port,
- (iii) Deemed export' of edible oils to 100% export oriented units with the condition that the final product be non-edible,
- (iv) Export of Oils produced out of minor forest produce, as per table given below, even if edible :

ITC (HS) Code	Item Description
15159010	Fixed Vegetable oils viz. Neutralised and Bleached Morwah Oil/fat, Neutralised and Bleached Kokum oil/fat, Neutralised and Bleached Sal oil/ sal fat / Stearine.
15159020	Fixed vegetable oils viz. Dhup oil, Neemseed oil
15159030	Fixed vegetable oils viz. Nigerseed oil.
15159040	Fixed vegetable oils viz. Neutralised and Bleached Mango kernel fat/oil/stearine/olein.
15179010	Sal Fat (Processed or Refined).
15219020	Shellac wax, whether or not coloured.

- (v) Export of edible oil from Domestic Tariff Area (DTA) to Special Economic Zone (SEZ) to be consumed by the SEZ units for manufacture of processed food products.
- (vi) Export of edible oil in branded consumer packs of up to 5 Kgs, subject to a limit of 10,000 MTs between 01.11.2011 to 31.10 2012. Such exports shall be allowed only from Customs EDI Ports.
- (vii) Export of 10,000 MTs of organic edible oils per annum duly certified by APEDA from EDI ports shall be permitted.
- (viii) Export of 2400 MTs of edible oils per annum to Bhutan (as per Calendar year i.e. 1st January to 31st December) will be exempted from any export ban.

Chapter 17

Sugars and Sugar Confectionery

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
93	1701 00 00	Kg	Sugar, except the following category at (a) :	Free	Subject to export licensing note 1 below
		Kg	(a) Preferential Quota Sugar to EU and USA	STE	Export permitted through M/s.Indian Sugar Exim Corporation Limited subject to quantitative ceiling notified by DGFT from time to time.

Export Licensing of Chapter 17

Note 1

A producer of sugar by vacuum pan process or a merchant Importer/exporter shall be required to obtain an export release order from the Chief Director (Sugar), Directorate of Sugar or any other Officer authorized by the Chief Director (Sugar) for export of sugar whether under Open General Licence or Advance Authorization Scheme on 'ton- to-ton' basis or any other scheme permitting Export of sugar.

Explanation: Where a producer of sugar or a merchant importer – exporter imports raw sugar under Advance Authorization Scheme and exports processed white or refined sugar for fulfillment of his export obligation under 'grain-to-grain' policy, such producer of sugar or merchant importer-exporter shall not be required to obtain an export release order from the Chief Director (Sugar), Directorate of Sugar."

Note 2

The requirement of obtaining release order from the Chief Director(Sugar), Directorate of Sugar for export of sugar as mentioned in the Export Licensing Note 1 above will not apply to export of 10,000 MTs of organic sugar, per annum. Export of organic sugar shall be subject to following conditions:

- (a) Quantity limit shall be 10,000 MTs per annum;
- (b) It should be duly certified by APEDA as being organic sugar;
- (c) Export contracts should be registered with APEDA, New Delhi prior to shipment;
- (d) Exports shall be allowed only from Customs EDI Ports."

Chapter 23

Residues and Waste from the Food Industries; Prepared Animal Fodder

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
94	2305 00 10 2305 00 20 2305 00 90	Kg	Deoiled groundnut cakes containing more than 1% oil and groundnut expeller cakes	Restricted	Exports permitted under licence
95	$\begin{array}{c} 1213\ 00\ 00\\ 1214\ 10\ 00\\ 1214\ 90\ 00\\ 2302\ 10\ 10\\ 2302\ 30\ 00\\ 2302\ 40\ 00\\ 2308\ 00\ 00\\ \end{array}$	kg	Fodder, including wheat and rice straw	Restricted	Exports permitted under licence
96	2302 20 20 2302 20 90	Kg	Rice bran, raw and boiled	Restricted	Exports permitted under licence
97	2309 23091000	Kg	Preparations of a kind used in animal feeding Dog or Cat food, put up for retail sale	Free	Export of the item produced from Animal By-Products to EU is allowed subject to the following conditions: (i) A 'Shipment Clearance Certificate' is to be issued consignment-wise by the CAPEXIL indicating details of the name and address of the exporter, address of the registered plant, IEC No. of the exporter, plant approval number, nature of export product, quantity, invoice number & date, port of loading (Name of the port) and destination. (ii) After the shipment is made, the exporter shall also provide 'Health Certificate' consignment-wise to the buyer giving details of vessel name, shipping bill number with date, production process, etc. as per the requirement of EU. The Certificatee would be issued jointly by

		CAPEXIL	and
		Regional	Animal
		Quarantine	Officer,
		Department	of Animal
		Husbandry,	Dairying
		and Fisheries	s, Ministry
		of A	griculture,
		Government	of India.

Chapter 25

Salt; Sulphur; Earths and Stone; Plastering Materials, Lime and Cement

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
98	2505 10 11	Kg	Sand and Soil	Restricted	Exports permitted under
	2505 10 12				licence
	2505 10 19				
	2505 10 20				
	2505 90 00				
	2530 90 99				

Export Licencing note of Chapter 25

Note 1

(i) Export of Stone Aggregate to Maldives permitted as per ceiling mentioned below subject to issue of No Objection within the annual ceiling by CAPEXIL who shall monitor the ceiling and send a quarterly report to Export Cell in DGFT:

S.No.	Item	Annual Ceiling of Quantity in MTs			
		2011-12	2012-13	2013-14	
1.	Stone Aggregate	5 lakh	5.5 lakh	6 lakh	

(ii) For the export of above quantity of Stone Aggregates, CAPEXIL shall ensure that the suppliers/extractors have obtained appropriate clearances".

Note 2

(i) Export of River Sand to Maldives permitted as per ceiling mentioned below subject to issue of No Objection within the annual ceiling by CAPEXIL who shall monitor the ceiling and send a quarterly report to Export Cell in DGFT.

For the Financial Year 2011-12 (on annual basis): 1,185,455 MTs.

- (ii) For the export of above quantity of River Sand, CAPEXIL shall ensure that the suppliers/extractors have obtained appropriate clearances and mining of the sand is not undertaken in the Coastal Regulation Zone Area, which is prohibited under the Coastal Regulation Zone notification.
- (iii) In addition to above, export of River Sand will be allowed subject to the exporter obtaining necessary environmental clearances/No Objection Certificate from the designated nodal authority of respective State Governments from where the River Sand is obtained.

Chapter 26

Ores, Slag and Ash

Note

1. Rare Earth compounds are freely exportable, but rare earth phosphates, which contain uranium and thorium are prescribed substances and are controlled as per provisions of Atomic Energy Act, 1962.

2. Other minerals under code 2617 are freely exportable, except those which have been notified as prescribed substances and controlled under Atomic Energy Act, 1962.

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
99	2601 11 00	Kg	Iron ore other than those specified under Free category	STE	Export through MMTC Limited
100	2601 11 00	Kg	Iron ore of Goa origin when exported to China, Europe, Japan, South Korea and Taiwan, irrespective of the Fe content;	Free	
101	2601 11 00	Kg	Iron ore of Redi origin to all markets, irrespective of the Fe content;	Free	
102	2601 11 00	Kg	All iron ore of Fe content upto 64%	Free	
103	2601 11 50	Kg	Iron ore concentrate prepared by benefication and/or concentration of low grade ore containing 40 percent or less of iron produced by Kudremukh Iron Ore Company Limited	STE	Kudremukh Iron Ore Company Limited, Bangalore
104	2601 12 10	Kg	Iron ore pellets manufactured by Kudremukh Iron Ore Company Limited.	STE	Kudremukh Iron Ore Company Limited, Bangalore
105	2601 12 90	Kg	Rejects of iron ore chips and like generated from the manufacturing process after using imported raw material	Free	The quantity of export of such rejects shall not be more than 10% of the imported raw materials i.e. pellets The size of the rejected pellets chips (fines) shall be less than 6 mm
106	2602 00 00	Kg	Manganese Ores excluding the following: Lumpy / blended Manganese ore with more than 46 percent	STE	Export through (a) MMTC Limited (b) Manganese Ore India Limited (MOIL)

			Manganese		for manganese ore produced in MOIL mines
107	2602 00 10	Kg	Lumpy/blended manganese ore with more than 46% manganese	Restricted	Export permitted under licence
108	2610 00 00	Kg	Chrome ore other than (i) beneficated chrome ore fines / concentrates (maximum feed grade to be less than 42% Cr ₂ O ₃) and (ii) those categories of Chrome ores mentioned as permitted through STEs.	Restricted	Export permitted under licence other than categories at (b) to (d) below
109	2610 00 30 2610 00 40	kg	Beneficated chrome ore fines / concentrates (maximum feed grade to be less than 42% Cr ₂ O ₃)	STE	Export through MMTC Limited (amended by notification no 5, dated 09.05.06)
110	2610 00 30	Kg	Chrome ore lumps with Cr_2O_3 not exceeding 40 percent	STE	Export through MMTC Limited
111	2610 00 90		Low silica friable/fine ore with Cr_2O_3 not exceeding 52 percent and Silica exceeding 4 percent	STE	Export through MMTC Limited
112	2610 00 90	Kg	Low Silica friable/fine Chromite Ore with Cr_2O_3 in the range of 52-54% and silica exceeding 4 %	STE	Export through MMTC Limited

Chapter 27

Mineral Fuels; Mineral Oils and Products of their Distillation; Bituminous Substances; Mineral waxes

S. No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
113	2709 00 00	Kg	Crude oil	STE	Export through Indian Oil Corporation Limited
114	2710 19 10	Kg	Kerosene	Free	Export allowed subject to obtaining NOC from Ministry of Petroleum and Natural Gas
115	2711 19 00	kg	Liquefied Petroleum Gas (LPG)	Free	Export allowed subject to obtaining NOC from Ministry of Petroleum and Natural Gas

Chapter 28

Inorganic Chemicals; Organic or Inorganic Compounds of Precious Metals, of Rare-Earth Metals, of Radioactive Elements of Isotopes

Note 1

Export of Potassium Permanganate is freely allowed subject to No Objection Certificate from Narcotics Commissioner, Gwalior for details, see Chapter-29.

Chapter 29

Organic Chemicals

Note - This chapter also includes relevant chemicals under chapter 27, 28 and 38.

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
116	2710 91 00	Kg	Poly Brominated Biphenyls	Free	No Objection Certificate from the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, New Delhi
117	2710 91 00	Kg	Poly Chlorinated Biphenyls	Free	No Objection Certificate from the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, New Delhi
118	2710 91 00	Kg	Poly Chlorinated terphenyls	Free	No Objection Certificate from the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, New Delhi
119	2920 90 30	Kg	Tris (2,3 Di-bromopropyl) phosphate	Free	No Objection Certificate from the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, New Delhi
120	2920 90 90	Kg	Crocidolite	Free	No Objection Certificate from the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, New Delhi
121	2841 61 00	Kg	Potassium Permanganate	Free	No Objection Certificate from Narcotics Commissioner of India, Gwalior
122	2915 24 00	Kg	Acetic Anhydride	Free	No Objection Certificate from Narcotics Commissioner of India, Gwalior
123	2939 41 00 2939 42 00	Kg	Ephedrine and its salts /Pseudoephedrine and its salts	Free	No Objection Certificate from Narcotics Commissioner of India, Gwalior

104	2005 41 00	V.	1 Discurd 2 Discussion 9 2 4	D	No. Objection Contification
124	2905 41 00	Kg	1- Phenyl-2 Propanone & 3,4-	Free	No Objection Certificate
			Methylenedioxyphenyl – 2-		from Narcotics Commissioner of India,
			Propanone		Gwalior
125	2914 12 00	V.a.	Methyl Ethyl Ketone	Free	No Objection Certificate
123	2914 12 00	Kg	Methyl Eulyl Ketone	riee	from Narcotics
					Commissioner of India,
					Gwalior
126	2903 00 00	Va	Chemicals included in	Restricted	Exports permitted under
120	2905 00 00	Kg	Annexures A and B to the	Restricted	
			Montreal Protocol on substances		licence. Export to countries which are not
			that deplete the Ozone Layer		Parties to the Montreal
			that depicte the Ozoffe Layer		Protocol is prohibited.
127	2903 00 00	Kg	Chemicals under Montreal	Prohibited	Not permitted to be
127	2703 00 00	ng	Protocol when exported to a	Trombited	exported
			country which is not party to the		exported
			`Montreal Protocol on		
			substances that Deplete the		
			Ozone Layer'		
			Annexure A		1
128	2903 41 00	Kg	Group I	Restricted	or Prohibited as above
_		0	(a) CFC13(CFC-11) Trichloro		upon whether country is
			fluoro methane.		Montreal Protocol or not.
129	2903 42 00	Kg	(b) CFC2C12 (CFC-12		
		C	Dicholoro difluoro methane.		
130	2903 43 00	Kg	(c) C2F3C13 (CFC-113) 1,1,2,		
			Trichloro-1,2,2 trifluoro ethane.		
131	2903 44 10	Kg	(d) C2F4C12 (CFC-114) 1,2		
			Dichloro tetrafluoro ethane.		
132	2903 44 20	Kg	(e) C2F5BrCI (CFC-115) Chloro		
			penta fluoro ethane		
133	2903 46 10	Kg	Group II		
			(f) CF2BrCI (halon-1211)		
104	2002 46 20		Bromo chloro difluoro methane.		
134	2903 46 20	Kg	(g) CF3B (halon-1301) Bromo		
125	2002 46 20	V.	trifluoro methane.		
135	2903 46 30	Kg	(h) C2F4Br2 (halon-2402) Dibromo tetrafluoro ethane.		
136	2903 45 11	Kg	Annexure B Group I		
150	2703 43 11	ng	(i) CF3CI (CFC-13) Chloro		
			trifluoro methane.		
137	2903 45 12	Kg	(j) C2FC15 (CFC-111)		
10,	2,00 10 12	8	Pentachloro fluoro ethane.		
138	2903 45 13	Kg	(k) C2F2C14 (CFC-112)		
		8	Tetrachloro difluoro ethane.		
139	2903 45 21	Kg	(l) C3FC17 (CFC-211)		
			Heptachloro - fluoroprapane.		
140	2903 45 22	Kg	(m) C3F2C16 (CFC212)		
			Hexachloro difluoro propane.		
141	2903 45 23	Kg	(n) C3F3C15 (CFC-213)		
			Pentachloro trifluoro propane.		
142	2903 45 24	Kg	(o) C3F5C14 (CFC-214)		
			Tetrachloro tetrafluoro propane.		

1.10	0000 45 05	177		
143	2903 45 25	Kg	(p) C3F5C13 (CFC	
144	2903 45 26	Kg	Trichloro pentafluc (q) C3F6C12 (CFC	
1 4 4	2703 43 20	ng	Dichloro hexafluor	
145	2903 45 27	Kg	(r) C3F7Cl (CFC-2	
110	2703 18 27	119	heptafluoro propan	
146	2903 14 00	Kg	Group II	
		-	(s) CC14 Carbon T	etrachloride
			Tetrachloro methar	ne.
147	2903 19 20	Kg	Group III	
			(t) CH3C13* 1,1,1	
			ethane. (Methyl Ch *This formula does	
			1,1,2-trichloro etha	
			Annexure C	Controlled
148	2903 49 10	kg	Group	substances
		8	Group I	Substance
			Ĩ	
			CHFCI ₂	(HCFC-21)
			CHF ₂ CI	(HCFC-22)
			CH ₂ FCI	(HCFC-31)
			C ₂ HFCI ₄	(HCFC- 121)
			$C_2HF_2CI_3$	(HCFC-122)
			$C_2HF_3CI_2$	(HCFC-123)
			CHCI ₂ CF ₃	(HCFC-123)
			CHFCICF ₃	(HCFC-124)
			CHFCICF ₃	(HCFC-
				124)
				(amended
				by
				notificatio n No 09,
				dated
				10.12.04)
			C ₂ H ₂ FCI ₃	(HCFC-
				131)
			$C_2H_2F_2CI_2$	(HCFC-132)
			$C_2H_2F_3CI$	(HCFC-133)
			C ₂ H ₃ FCI ₂	(HCFC-141)
			CH ₃ CFCI ₂	(HCFC-141h)
			$C_2H_3F_2CI$	141b) (HCFC-142)
			$C_2H_3F_2CI$ CH ₃ CF ₂ CI	(HCFC-142) (HCFC-
				(Her e- 142b)
			C ₂ H ₄ FCI	(HCFC-
				151)
			C ₃ HFCI ₆	(HCFC-
				221)
			$C_3HF_2CI_5$	(HCFC-222)
			$C_3HF_3CI_4$	(HCFC-223) (HCFC-224)
			$C_3HF_4CI_3$ $C_3HF_5CI_2$	(HCFC-224) (HCFC-225)
			C ₃ Hr ₅ Cl ₂ CF ₃ CF ₂ CHCl ₂	(HCFC-223) (HCFC-
				(HCPC- 225ca)
I	1	T	I	

$149 2903 49 90 = \begin{bmatrix} 1 & 2050 & 2050 \\ 23 H_2FGL & (HCFC-226) \\ C_3H_2F_3CL & (HCFC-231) \\ C_3H_2F_3CL & (HCFC-232) \\ C_3H_2F_3CL & (HCFC-233) \\ C_3H_2F_3CL & (HCFC-234) \\ C_3H_2F_3CL & (HCFC-242) \\ C_3H_3F_3CL & (HCFC-242) \\ C_3H_3F_4CL & (HCFC-243) \\ C_3H_3F_4CL & (HCFC-243) \\ C_3H_3F_4CL & (HCFC-253) \\ C_3H_4F_5CL & (HCFC-253) \\ C_3H_4F_5CL & (HCFC-253) \\ C_3H_4F_5CL & (HCFC-253) \\ C_3H_4F_5CL & (HCFC-253) \\ C_3H_3F_4CL & (HCFC-253) \\ C_3H_4F_5CL & (HCFC-253) \\ C_3H_4F_5CL & (HCFC-253) \\ C_3H_3F_4CL & (HCFC-253) \\ C_3H_5Br & (HCFC-253) \\ C_3H_5FBr & $			CF ₂ CICF ₂ CHCIF	(HCFC-
$149 2903 49 90 \begin{cases} C_3HF_6CI & (HCFC-226) \\ C_3H_2F_5CI_3 & (HCFC-232) \\ C_3H_2F_5CI_3 & (HCFC-233) \\ C_3H_2F_4CI_2 & (HCFC-234) \\ C_3H_2F_4CI_1 & (HCFC-234) \\ C_3H_3F_4CI_1 & (HCFC-242) \\ C_3H_3F_4CI_2 & (HCFC-242) \\ C_3H_3F_4CI_3 & (HCFC-242) \\ C_3H_3F_4CI_3 & (HCFC-244) \\ C_3H_3F_4CI_1 & (HCFC-244) \\ C_3H_3F_4CI_2 & (HCFC-253) \\ C_3H_3F_4CI_1 & (HCFC-253) \\ C_3H_3F_4CI_2 & (HCFC-253) \\ C_3H_3F_4CI_2 & (HCFC-253) \\ C_3H_3F_4CI_1 & (HCFC-253) \\ C_3H_3F_4CI_2 & (HCFC-253) \\ C_3H_3F_4CI_2 & (HCFC-253) \\ C_3H_3F_4CI_3 & (HCFC-253) \\ C_3H_3F_4CI_4 & (HCFC-253) \\ C_3H_2B_7 & (H$				`
$149 2903 49 90 \begin{bmatrix} C_3H_2F_2CL_4 & (HCFC-232) \\ C_3H_2F_3CL_3 & (HCFC-233) \\ C_3H_2F_3CL & (HCFC-234) \\ C_3H_2F_3CL & (HCFC-242) \\ C_3H_3F_3CL_3 & (HCFC-242) \\ C_3H_3F_3CL_3 & (HCFC-242) \\ C_3H_3F_3CL & (HCFC-243) \\ C_3H_4F_3CL & (HCFC-253) \\ C_3H_4F_3Br & (HCFC-2$			C ₃ HF ₆ CI	· · · · · · · · · · · · · · · · · · ·
$149 2903 49 90 \begin{bmatrix} C_3H_2F_3CI_3 & (HCFC-233) \\ C_3H_2F_4CI_2 & (HCFC-234) \\ C_3H_3F_5CI & (HCFC-241) \\ C_3H_3F_5CI_3 & (HCFC-242) \\ C_3H_3F_4CI_4 & (HCFC-243) \\ C_3H_3F_4CI_5 & (HCFC-243) \\ C_3H_3F_4CI_5 & (HCFC-243) \\ C_3H_4F_5CI_5 & (HCFC-253) \\ C_3H_4F_5CI_6 & (HCFC-253) \\ C_3H_4F_5CI_7 & (HCFC-253) \\ C_3H_3F_5CI & (HCFC-253) \\ C_3H_3F_4CI_7 & (HBFC-253) \\ C_3H_3F_5CI & (HCFC-253) \\ C_3H_3F_3F_2 & (HEFC-253) \\ C_3H_5F_2 & (HEFC-253) \\ C_3H_5F_2 & (HEFC-253) \\ C_3H_5F_2 & (HEFC-253) \\ C_3H_5F_2 & (HEFC-253) \\ C_3H_5F_3F_3 & (HEFC$			$C_3H_2FCI_5$	(HCFC-231)
$149 2903 49 90 \begin{cases} C_3H_2F_2C_3 & (HCFC-234) \\ C_3H_2F_2C_1 & (HCFC-242) \\ C_3H_3F_3C_3 & (HCFC-242) \\ C_3H_3F_3C_1 & (HCFC-242) \\ C_3H_3F_2C_1 & (HCFC-243) \\ C_3H_3F_2C_1 & (HCFC-251) \\ C_3H_4F_3C_1 & (HCFC-252) \\ C_3H_4F_3C_1 & (HCFC-252) \\ C_3H_3F_2C_1 & (HCFC-252) \\ C_3H_3F_3C_1 & (HCFC-252) \\ C_3H_3F_3C_$				
$149 2903 49 90 \begin{cases} C_3H_2F_4CL_2 & (HCFC-234) \\ C_3H_3F_5CI & (HCFC-243) \\ C_3H_3F_5CI_3 & (HCFC-242) \\ C_3H_3F_5CI_2 & (HCFC-243) \\ C_3H_3F_5CI_2 & (HCFC-243) \\ C_3H_3F_5CI_1 & (HCFC-253) \\ C_3H_4F_5CI & (HCFC-253) \\ C_3H_3F_2CI & (HCFC-253) \\ C_3H_3F_2I & (HEFC-253) \\ C_3H_3F_3I & (HEFC-$			$C_3H_2F_3CI_3$	
$149 2903 49 90 \begin{bmatrix} C_3H_2F_5CI & (HCFC-235) \\ C_3H_3F_5CI_3 & (HCFC-241) \\ C_3H_3F_5CI_5 & (HCFC-242) \\ C_3H_3F_5CI & (HCFC-243) \\ C_3H_3F_5CI & (HCFC-251) \\ C_3H_4F_5CI_2 & (HCFC-252) \\ C_3H_4F_5CI & (HCFC-252) \\ C_3H_3F_2CI & (HCFC-253) \\ C_3H_3F_2F_3I & (HCFC-253) \\ C_3H_3F_3F_1 & (HCFC-253) \\ $				· ·
$149 2903 49 90 \begin{cases} C_3H_3FCL_4 & (HCFC-241) \\ C_3H_3F_3CL_3 & (HCFC-242) \\ C_3H_3F_4CL & (HCFC-243) \\ C_3H_4FCL_3 & (HCFC-251) \\ C_3H_4F_2CL_2 & (HCFC-252) \\ C_3H_4F_4CL_3 & (HCFC-253) \\ C_3H_3F_2CL & (HCFC-253) \\ C_3H_5Br & (HBFC-253) \\ C_2H_5Br & (HBFC-253) \\ C_2H_5Br & (HBFC-253) \\ C_2H_5Br & (HBFC-253) \\ C_2H_2F_3Br_2 & (HBFC-253) \\ C_2H_2F_3Br_3 & (HBFC-253) \\ C_3H_2F_3Br_3 & (HBFC-253) \\ C_3H_5Br_3 & (HF-25) \\ C_3H_5Br_3 & (HF-25) \\ C_3H_5Br_3 & (HF-25) \\ C_3H_2F_3Br_3 & (HF-25) $			-	
$149 2903 49 90 \begin{cases} C_3H_3F_3CI_3 & (HCFC-242) \\ C_3H_3F_4CI & (HCFC-243) \\ C_3H_3F_4CI & (HCFC-251) \\ C_3H_4F_4CI & (HCFC-252) \\ C_3H_4F_4CI & (HCFC-253) \\ C_3H_3F_4CI & (HCFC-253) \\ C_4H_7Br & (HCFC-253) \\ C_{4}H_7Br & (HCFC$				
$149 2903 49 90 \begin{cases} C_3H_3F_2CL_2 & (HCFC-243) \\ C_3H_4F_4CI & (HCFC-244) \\ C_3H_4F_4CI & (HCFC-251) \\ C_3H_4F_4CI & (HCFC-253) \\ C_3H_3F_4CI & (HCFC-253) \\ C_3H_3F_4CI & (HCFC-263) \\ C_3H_3F_4CI & (HCFC-263) \\ C_3H_4FCI & (HCFC-263) \\ C_3H_4FBI & (HCFC-263) \\ C_3H_4FBI & (HCFC-263) \\ C_2H_5BI & (HCFC-263) \\ C_2H_7BI & (HCFC-263) \\ C_2H_4FBI & (HCFC-263) \\ C_2H_7BI & (HCFC-263) \\ C_3H_7BI & (HCFC-2$				
$149 2903 49 90 \begin{cases} C_3H_3F_{1}C_{1} & (HCFC-244) \\ C_3H_4F_{2}C_{1} & (HCFC-251) \\ C_3H_4F_{2}C_{1} & (HCFC-253) \\ C_3H_3F_{2}C_{1} & (HCFC-253) \\ C_3H_3F_{2}C_{2} & (HCFC-253) \\ C_3H_3F_{2}C_{2} & (HCFC-253) \\ C_3H_3F_{2}C_{2} & (HCFC-253) \\ C_3H_5B_{1} & (C_{2}H_{1}) \\ C_{1}H_5B_{1} & (C_{2}H_{1}) \\ C_{2}H_7B_{1} & (C_{2}H_{1}) \\ C_{3}H_7B_{1} & (C_{3}H_{1}) \\ $				
$149 2903 49 90 \left(\begin{array}{ccc} C_{3}H_{4}FCI_{3} & (HCFC-251) \\ C_{3}H_{4}F_{2}CI_{2} & (HCFC-252) \\ C_{3}H_{4}F_{2}CI & (HCFC-253) \\ C_{3}H_{3}F_{2}CI & (HCFC-253) \\ C_{3}H_{3}F_{2}CI & (HCFC-253) \\ C_{3}H_{4}FCI & (HCFC-253) \\ C_{3}H_{6}FCI & (HCFC-253) \\ C_{3}H_{6}FCI & (HCFC-253) \\ C_{3}H_{6}FCI & (HCFC-253) \\ C_{3}H_{6}FCI & (HCFC-253) \\ C_{2}H_{7}Br & (HCFC-253) \\ C_{2}H_{7}Br & (HCFC-253) \\ C_{1}H_{7}Br & (HCFC-253) \\ C_{2}H_{7}Br & (HFFC-253) \\ C_{2}H_{7}Br & (HFFC-25) \\ C_{2$				
$\begin{bmatrix} C_{3}H_{4}F_{2}CI_{2} & (HCFC-252) \\ C_{3}H_{4}F_{3}CI & (HCFC-253) \\ C_{3}H_{3}FCI_{2} & (HCFC-253) \\ C_{3}H_{3}F_{2}CI & (HCFC-262) \\ C_{3}H_{5}F_{2}CI & (HCFC-262) \\ C_{3}H_{6}FCI & (HCFC-271) \\ C_{3}H_{6}FCI & (HCFC-271) \\ C_{3}H_{6}FCI & (HCFC-271) \\ C_{4}H_{5}Br & (HBFC-271) \\ C_{4}H_{5}Br & (HBFC-271) \\ C_{2}H_{7}Br & (HBFC-271) \\ C_{3}H_{7}Br & (HBFC-271) \\ C_{3}H_{7}F_{3}Br & (HBFC-271) \\ C_{$				
$\begin{bmatrix} C_{3}H_{4}F_{3}CI & (HCFC-253) \\ C_{3}H_{3}FCI_{2} & (HCFC-253) \\ C_{3}H_{3}F_{2}CI & (HCFC-261) \\ C_{3}H_{3}F_{2}CI & (HCFC-261) \\ C_{3}H_{6}FCI & (HCFC-271) \\ C_{3}H_{6}FCI & (HCFC-271) \\ C_{3}H_{6}FCI & (HCFC-271) \\ C_{4}H_{5}Br_{1} & (HBFC-271) \\ C_{4}H_{5}Br_{1} & (HBFC-271) \\ C_{2}H_{7}Br_{1} & (HBFC-271) \\ C_{3}H_{7}Br_{1} & (HBFC-271) \\ C_{3}H_{7}Br_{2} & (HBFC-271) \\ C_{3}H_{7}F_{3}Br_{2} & (HBFC-271) \\ C_{3}H_{7}F_{4}Br_{3} & (HBFC-271) \\ C_{3}H_{7}$				
$\begin{bmatrix} C_{3}H_{3}FCI_{2} & (HCFC-261) \\ C_{3}H_{3}F_{2}CI & (HCFC-262) \\ C_{3}H_{4}FCI & (HCFC-262) \\ C_{3}H_{6}FCI & (HCFC-271) \\ C_{3}H_{7}Br_{2} & (HBFC-271) \\ C_{2}HF_{2}Br_{3} & (HBFC-271) \\ C_{2}HF_{2}Br_{3} & (HBFC-271) \\ C_{2}HF_{2}Br_{3} & (HBFC-271) \\ C_{2}HF_{2}Br_{3} & (HBFC-271) \\ C_{2}HF_{7}Br_{2} & (HBFC-271) \\ C_{2}HF_{7}Br_{2} & (HBFC-271) \\ C_{2}HF_{7}Br_{2} & (HBFC-271) \\ C_{2}HF_{7}Br_{3} & (HBFC-271) \\ C_{3}HF_{7}Br_{3} & (HBFC-271) \\ C_{3}HF_{7}F_{3}F_{3} & (HBFC-271) \\ C_{3}HF_{7}F_{3}F_{3} & (HBFC-271) \\ C_{3}HF_{7}F_{3} & (HBFC-271) \\ C_{3}HF_{7}F_{3} & (HBFC-271) \\ C_{3}HF_{7}F_{3} & (HBFC-271) \\ C_{3}HF_{7}F_{3}$			-	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			C ₃ H ₅ FCI ₂	(HCFC-
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$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			$C_3H_5F_2CI$	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			C ₃ H ₆ FCI	`
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				271)
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			Crown	Substance
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	149	2903 49 90		Substance
$\begin{array}{c} 22BI) \\ CHF_2Br \\ CH_2FBr \\ C_2HFBr_4 \\ C_2HF_2Br_3 \\ C_2HF_3Br_2 \\ C_2HF_3Br_2 \\ C_2HF_3Br \\ C_2H_2FBr_3 \\ C_2H_2F_3Br \\ C_2H_3FBr_2 \\ C_2H_3FBr_2 \\ C_2H_3FBr_2 \\ C_2H_3FBr_3 \\ C_2HFBr_6 \\ C_3HF_2Br_5 \\ C_3HF_3Br_4 \\ C_3HF_3Br_4 \\ C_3HF_3Br_2 \\ C_3HF_5Br \\ C_3H_2FBr_5 \\ C_3H_2FBr_5 \\ C_3H_2FBr_5 \\ C_3H_2FBr_5 \\ C_3H_2FBr_5 \\ C_3H_2FBr_3 \\ C_3H_2F_3Br_3 \\ C_3H_2F_3Br_3 \\ C_3H_2F_3Br_3 \\ C_3H_2F_3Br_3 \\ C_3H_3F_3Br_2 \\ C_3H_3F_3Br_2 \\ C_3H_3F_4Br_3 \\ \end{array}$	177	2703 47 70	-	(HBFC-
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$				
$\begin{array}{c} CH_2FBr\\ C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2F_3Br_3\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3F_2Br\\ C_2H_3F_2Br\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_4Br_3\\ C_3HF_5Br_2\\ C_3HF_5Br_2\\ C_3HF_5Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_3FBr_4\\ C_3H_3F_3Br_2\\ C_3H_3F_4Br_3\\ C_3H_3F_4Br_3\\ \end{array}$			CHF ₂ Br	,
$\begin{array}{c} C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3F_2Br\\ C_2H_3F_2Br\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_4Br_3\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_4\\ C_3H_3F_3Br_4\\ C_3H_3F_3Br_2\\ C_3H_3F_4Br\end{array}$				
$\begin{array}{c} C_2HF_3Br_2\\ C_2HF_4Br\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3FBr\\ C_2H_3FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_3Br_4\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_3F_3Br_2\\ C_3H_3F_4Br\end{array}$			CH ₂ FBr	
$\begin{array}{c} C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3FBr\\ C_2H_3FBr\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_3Br_4\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_4Br_2\\ C_3H_2F_3Br_4\\ C_3H_3F_3Br_4\\ C_3H_3F_3Br_2\\ C_3H_3F_4Br\end{array}$				
$\begin{array}{c} C_{2}H_{2}FBr_{3}\\ C_{2}H_{2}F_{2}Br_{2}\\ C_{2}H_{2}F_{3}Br\\ C_{2}H_{3}FBr_{2}\\ C_{2}H_{3}FBr_{2}\\ C_{2}H_{3}FPBr\\ C_{2}HFBr_{6}\\ C_{3}HF_{2}Br_{5}\\ C_{3}HF_{2}Br_{5}\\ C_{3}HF_{3}Br_{4}\\ C_{3}HF_{4}Br_{3}\\ C_{3}HF_{5}Br\\ C_{3}HF_{5}Br\\ C_{3}HF_{5}Br\\ C_{3}H_{2}FBr_{5}\\ C_{3}H_{2}FBr_{5}\\ C_{3}H_{2}FBr_{5}\\ C_{3}H_{2}FBr_{5}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{3}FFr_{4}\\ C_{3}H_{3}FPr_{4}\\ C_{3}HPr_{4}Br\end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \end{array}$	
$\begin{array}{c} C_{2}H_{2}F_{2}Br_{2} \\ C_{2}H_{2}F_{3}Br \\ C_{2}H_{3}FBr_{2} \\ C_{2}H_{3}FBr_{2} \\ C_{2}H_{3}F_{2}Br \\ C_{2}H_{4}FBr \\ C_{2}HFBr_{6} \\ C_{3}HF_{2}Br_{5} \\ C_{3}HF_{3}Br_{4} \\ C_{3}HF_{4}Br_{3} \\ C_{3}HF_{5}Br_{2} \\ C_{3}HF_{5}Br \\ C_{3}HF_{5}Br \\ C_{3}H_{2}FBr_{5} \\ C_{3}H_{2}FBr_{5} \\ C_{3}H_{2}FBr_{5} \\ C_{3}H_{2}FBr_{5} \\ C_{3}H_{2}F_{3}Br_{3} \\ C_{3}H_{2}F_{3}Br_{3} \\ C_{3}H_{2}F_{3}Br_{4} \\ C_{3}H_{3}FBr_{4} \\ C_{3}H_{3}F_{2}Br_{3} \\ C_{3}H_{3}F_{4}Br \\ \end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2 \end{array}$	
$\begin{array}{c} C_{2}H_{2}F_{3}Br\\ C_{2}H_{3}FBr_{2}\\ C_{2}H_{3}F_{2}Br\\ C_{2}H_{3}F_{2}Br\\ C_{2}H_{4}FBr\\ C_{2}HFBr_{6}\\ C_{3}HF_{2}Br_{5}\\ C_{3}HF_{3}Br_{4}\\ C_{3}HF_{4}Br_{3}\\ C_{3}HF_{5}Br_{2}\\ C_{3}HF_{5}Br\\ C_{3}HF_{5}Br\\ C_{3}H_{2}F_{3}Br_{5}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{3}Br\\ C_{3}H_{3}FBr_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{3}Br_{2}\\ C_{3}H_{3}F_{4}Br\end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br \end{array}$	
$\begin{array}{c} C_{2}H_{3}FBr_{2} \\ C_{2}H_{3}F_{2}Br \\ C_{2}H_{4}FBr \\ C_{2}HFBr_{6} \\ C_{3}HF_{2}Br_{5} \\ C_{3}HF_{3}Br_{4} \\ C_{3}HF_{4}Br_{3} \\ C_{3}HF_{5}Br_{2} \\ C_{3}HF_{5}Br \\ C_{3}HF_{5}Br \\ C_{3}H_{2}F_{3}Br_{5} \\ C_{3}H_{2}F_{3}Br_{3} \\ C_{3}H_{2}F_{4}Br_{2} \\ C_{3}H_{3}F_{3}Br \\ C_{3}H_{3}F_{2}Br_{3} \\ C_{3}H_{3}F_{3}Br_{2} \\ C_{3}H_{3}F_{4}Br \\ \end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2HF_4Br\\ C_2H_2FBr_3 \end{array}$	
$\begin{array}{c} C_{2}H_{3}F_{2}Br\\ C_{2}H_{4}FBr\\ C_{2}HFBr_{6}\\ C_{3}HF_{2}Br_{5}\\ C_{3}HF_{3}Br_{4}\\ C_{3}HF_{4}Br_{3}\\ C_{3}HF_{5}Br_{2}\\ C_{3}HF_{5}Br\\ C_{3}HF_{5}Br\\ C_{3}H_{2}F_{3}Br_{5}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{4}Br_{2}\\ C_{3}H_{3}F_{3}Br_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{4}Br\\ \end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2 \end{array}$	
$\begin{array}{c} C_{2}H_{4}FBr\\ C_{2}HFBr_{6}\\ C_{3}HF_{2}Br_{5}\\ C_{3}HF_{3}Br_{4}\\ C_{3}HF_{4}Br_{3}\\ C_{3}HF_{5}Br_{2}\\ C_{3}HF_{5}Br\\ C_{3}HF_{5}Br\\ C_{3}H_{2}F_{3}Br_{5}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{4}Br_{2}\\ C_{3}H_{3}F_{3}Br_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{4}Br\\ \end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_3 Br \end{array}$	
$\begin{array}{c} C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_4Br_3\\ C_3HF_5Br_2\\ C_3HF_5Br\\ C_3H2F_3Br_5\\ C_3H2F_2Br_4\\ C_3H2F_3Br_3\\ C_3H2F_4Br_2\\ C_3H_2F_5Br\\ C_3H_3FBr_4\\ C_3H_3F_2Br_3\\ C_3H_3F_2Br_3\\ C_3H_3F_4Br\end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_3 Br \\ C_2 H_3 FBr_2 \end{array}$	
$\begin{array}{c} C_{3}HF_{2}Br_{5} \\ C_{3}HF_{3}Br_{4} \\ C_{3}HF_{4}Br_{3} \\ C_{3}HF_{5}Br_{2} \\ C_{3}HF_{5}Br \\ C_{3}HF_{5}Br \\ C_{3}H_{2}F_{8}Br_{5} \\ C_{3}H_{2}F_{3}Br_{3} \\ C_{3}H_{2}F_{4}Br_{2} \\ C_{3}H_{2}F_{5}Br \\ C_{3}H_{3}FBr_{4} \\ C_{3}H_{3}F_{2}Br_{3} \\ C_{3}H_{3}F_{4}Br \\ \end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_3 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 F_2 Br \end{array}$	
$\begin{array}{c} C_{3}HF_{4}Br_{3}\\ C_{3}HF_{5}Br_{2}\\ C_{3}HF_{5}Br\\ C_{3}HF_{5}Br\\ C_{3}H_{2}FBr_{5}\\ C_{3}H_{2}F_{2}Br_{4}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{4}Br_{2}\\ C_{3}H_{2}F_{5}Br\\ C_{3}H_{3}FBr_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{4}Br\\ \end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_3 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 FBr_2 \\ C_2 H_4 FBr \end{array}$	
$\begin{array}{c} C_{3}HF_{5}Br_{2} \\ C_{3}HF_{5}Br \\ C_{3}HF_{5}Br \\ C_{3}H_{2}FBr_{5} \\ C_{3}H_{2}F_{2}Br_{4} \\ C_{3}H_{2}F_{3}Br_{3} \\ C_{3}H_{2}F_{4}Br_{2} \\ C_{3}H_{2}F_{5}Br \\ C_{3}H_{3}FBr_{4} \\ C_{3}H_{3}F_{2}Br_{3} \\ C_{3}H_{3}F_{4}Br \\ \end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_3 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 FBr_2 \\ C_2 H_4 FBr \\ C_2 H_4 FBr \\ C_2 HFBr_6 \end{array}$	
$\begin{array}{c} C_{3}HF_{5}Br\\ C_{3}H_{2}FBr_{5}\\ C_{3}H_{2}F_{2}Br_{4}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{4}Br_{2}\\ C_{3}H_{2}F_{5}Br\\ C_{3}H_{3}FBr_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{4}Br\\ \end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_2 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 FBr_2 \\ C_2 H_4 FBr \\ C_2 HFBr_6 \\ C_3 HF_2 Br_5 \\ C_3 HF_3 Br_4 \end{array}$	
$\begin{array}{c} C_{3}H_{2}FBr_{5} \\ C_{3}H_{2}F_{2}Br_{4} \\ C_{3}H_{2}F_{3}Br_{3} \\ C_{3}H_{2}F_{4}Br_{2} \\ C_{3}H_{2}F_{5}Br \\ C_{3}H_{3}FBr_{4} \\ C_{3}H_{3}F_{2}Br_{3} \\ C_{3}H_{3}F_{3}Br_{2} \\ C_{3}H_{3}F_{4}Br \end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_2 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 FBr_2 \\ C_2 H_4 FBr \\ C_2 HFBr_6 \\ C_3 HF_2 Br_5 \\ C_3 HF_3 Br_4 \\ C_3 HF_4 Br_3 \end{array}$	
$\begin{array}{c} C_{3}H_{2}F_{2}Br_{4}\\ C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{4}Br_{2}\\ C_{3}H_{2}F_{5}Br\\ C_{3}H_{3}FBr_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{3}Br_{2}\\ C_{3}H_{3}F_{4}Br\end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_3 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 FBr_2 \\ C_2 H_4 FBr \\ C_2 HFBr_6 \\ C_3 HF_2 Br_5 \\ C_3 HF_2 Br_5 \\ C_3 HF_3 Br_4 \\ C_3 HF_4 Br_3 \\ C_3 HF_5 Br_2 \end{array}$	
$\begin{array}{c} C_{3}H_{2}F_{3}Br_{3}\\ C_{3}H_{2}F_{4}Br_{2}\\ C_{3}H_{2}F_{5}Br\\ C_{3}H_{3}FBr_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{3}Br_{2}\\ C_{3}H_{3}F_{4}Br\\ \end{array}$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_2 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 FBr_2 \\ C_2 H_4 FBr \\ C_2 H_4 FBr \\ C_2 HFBr_6 \\ C_3 HF_2 Br_5 \\ C_3 HF_3 Br_4 \\ C_3 HF_4 Br_3 \\ C_3 HF_5 Br_2 \\ C_3 HF_5 Br \\ \end{array}$	
$\begin{array}{c} C_{3}H_{2}F_{4}Br_{2} \\ C_{3}H_{2}F_{5}Br \\ C_{3}H_{3}FBr_{4} \\ C_{3}H_{3}F_{2}Br_{3} \\ C_{3}H_{3}F_{3}Br_{2} \\ C_{3}H_{3}F_{4}Br \end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3F_2Br\\ C_2H_4FBr\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_4Br_3\\ C_3HF_5Br_2\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3HF_5Br_5\\ \end{array}$	
$\begin{array}{c} C_{3}H_{2}F_{5}Br\\ C_{3}H_{3}FBr_{4}\\ C_{3}H_{3}F_{2}Br_{3}\\ C_{3}H_{3}F_{3}Br_{2}\\ C_{3}H_{3}F_{4}Br\\ \end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3F_2Br\\ C_2H_4FBr\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_4Br_3\\ C_3HF_5Br_2\\ C_3HF_5Br\\ C_3HF_5Br\\ C_3H_2FBr_5\\ C_3H_2FBr_5\\ C_3H_2F_2Br_4\\ \end{array}$	
$\begin{array}{c} C_3H_3FBr_4\\ C_3H_3F_2Br_3\\ C_3H_3F_3Br_2\\ C_3H_3F_4Br \end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3FBr_2\\ C_2H_3F_2Br\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_4Br_3\\ C_3HF_5Br_2\\ C_3HF_5Br_2\\ C_3HF_5Br_5\\ C_3H_2FBr_5\\ C_3H_2FBr_5\\ C_3H_2F_3Br_3\\ \end{array}$	
$\begin{array}{c} C_3H_3F_2Br_3\\ C_3H_3F_3Br_2\\ C_3H_3F_4Br \end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3F_2Br\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_5Br_2\\ C_3HF_5Br\\ C_3H_2FBr_5\\ C_3H_2FBr_5\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_4Br_2\\ \end{array}$	
$\begin{array}{c} C_3H_3F_3Br_2\\ C_3H_3F_4Br\end{array}$			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3F_2Br\\ C_2H_3F_2Br\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_5Br_2\\ C_3HF_5Br_2\\ C_3HF_5Br_2\\ C_3HF_5Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3\\ C_3H_2F_3\\ C_3H_3F_3\\ C_3H_3F_3\\ C_3H_3F_3\\ C_3H_3F_3\\ C_3H_3F_3\\ C_3H_3F_3\\ $	
$C_3H_3F_4Br$			$\begin{array}{c} C_2 HFBr_4 \\ C_2 HF_2 Br_3 \\ C_2 HF_3 Br_2 \\ C_2 HF_4 Br \\ C_2 H_2 FBr_3 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_2 Br_2 \\ C_2 H_2 F_3 Br \\ C_2 H_3 FBr_2 \\ C_2 H_3 FBr_2 \\ C_2 H_4 FBr \\ C_2 HFBr_6 \\ C_3 HF_2 Br_5 \\ C_3 HF_2 Br_5 \\ C_3 HF_3 Br_4 \\ C_3 HF_3 Br_4 \\ C_3 HF_5 Br \\ C_3 H_2 FBr_5 \\ C_3 H_2 FBr_5 \\ C_3 H_2 FBr_5 \\ C_3 H_2 FBr_3 \\ C_3 H_2 F_3 Br_3 \\ C_3 H_2 F_3 Br_3 \\ C_3 H_2 F_3 Br \\ C_3 H_3 FBr_4 \end{array}$	
			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3FBr\\ C_2H_3FBr\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_4Br_3\\ C_3HF_5Br_2\\ C_3H_2FBr_5\\ C_3H_2FBr_5\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_3F_2Br_4\\ C_3H_3F_2Br_3\\ \end{array}$	
			$\begin{array}{c} C_2HFBr_4\\ C_2HF_2Br_3\\ C_2HF_3Br_2\\ C_2HF_4Br\\ C_2H_2FBr_3\\ C_2H_2F_2Br_2\\ C_2H_2F_2Br_2\\ C_2H_2F_3Br\\ C_2H_3FBr_2\\ C_2H_3FBr\\ C_2H_3FBr\\ C_2H_4FBr\\ C_2HFBr_6\\ C_3HF_2Br_5\\ C_3HF_3Br_4\\ C_3HF_3Br_4\\ C_3HF_5Br\\ C_3H_2FBr_5\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_3\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_2F_3Br_4\\ C_3H_3F_2Br_3\\ C_3H_3F_3Br_4\\ C_3H_3F_2Br_3\\ C_3H_3F_3Br_2\\ \end{array}$	

1		1	1	$C_3H_4F_2Br_2$	I
				$C_3H_4F_3Br$	
				$C_3H_5FBr_2$	
				$C_3H_5F_2Br$	
				C ₃ H ₆ FBr	
				Group-III	
	150	2903 49 90		CH ₂ BrCI-	
				Annexure D - Reserved	
	151	3808 10 24	kg	Annexure E	
				CH3Br	
				Methyle Bromide	

Chapter 30

Pharmaceutical Products

Note 1 Formulations of plant portions of prohibited varieties falling in heading 3003 and heading 3004 are freely exportable subject to conditions. For details, please see chapter 12.

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
152	3002 10 11 3002 10 12 3002 10 13 3002 10 14 3002 10 19 3002 10 20 3002 10 91 3002 90 10 3002 90 20	Kg	Whole human blood plasma and all products derived from human blood except gamma globulin and human serum albumin manufactured from human placenta and human placental blood; Raw placenta; Placental blood plasma	Free	Export allowed subject to obtaining No Objection Certificate from DGHS
153	3002 10 20	Kg	Gamma globulin and human serum albumin manufactured from human placenta and human placental blood	Free	
154	3002 10 11 3002 10 12 3002 10 19 3002 10 20 3002 90 10 3002 90 20	Kg	Samples of whole human blood plasma and all products derived from human blood; Raw placenta; Placental blood plasma in individual cases for diagnostic / therapeutic purposes	Free	Recommendation from a doctor
155	3003 90 36 3004 90 96	Kg	Ketamine	Free	Export allowed subject to obtaining No Objection Certificate from Narcotics Commissioner
156	30021020	Kg	Blood products for technical use in medical devices, In Vitro Diagnostics & Laboratory Reagents not intended for human consumption,	Free	 Export to EU allowed subject to the following conditions: (i) A 'Shipment Clearance Certificate' is to be issued consignment-wise by the CAPEXIL indicating details of the name and address of the exporter, address of the registered plant, IEC No. of the exporter, plant approval

		number, nature of
		export product,
		quantity, invoice
		number & date, port
		of loading (Name of
		the port) and
		destination.
		(ii) After the shipment
		is made, the exporter
		shall also provide a
		'Production
		Process' certificate
		and/or' health
		certificate to the buyer
		consignment-wise to be
		issued by CAPEXIL as
		per the requirement of
		EU.
		LU.

Export Licensing Note of Chapter 30

"The words 'Heavy metals within permissible limits' have be conspicuously displayed on the container of purely Herbal Ayurveda, Siddha and Unani medicines to be exported. Alternatively, a Certificate that 'Heavy metals within permissible limits ' issued either by an inhouse laboratory fully equipped with appropriate equipments for testing heavy metals or by any other NABL / GLP accredited laboratory or any other approved laboratory has to be produced along with other consignment papers."

Chapter 31

Fertilisers

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
157	3102 10 00	Kg	Urea	Restricted	Export permitted under licence.
158	3103 10 00	Kg	 Straight Phosphatic Fetilizers given below : 1. Single Super Phosphate (16% P₂O₅) Powdered 2. Single Super Phosphate (14% P₂O₅) Powdered 3. Single Super Phosphate (16% P2O5) Granulated 	Free	Manufacturers of SSP as listed at Export Licensing Note 1 at List A below shall be allowed to export their own manufactured SSP subject to the following conditions : 1. Intimation to Department of Fertilizer about quantity of export along with a self- declaration and a certificate issued by statutory auditors that no concession/ subsidy has been claimed for intended export. 2. Production of above declaration / certificate as at (i) above to Customs at the time of export.
159	3103 10 00	Kg	Other Straight Phosphatic Fertilizers of the specifications at Entry number 158 above which do not meet the specified conditions for free exports	Restricted	Export permitted under licence
160	3105 30 00	Kg	N.P. Complex Fertilizers given below : Diammonium Phosphate (DAP) (18-46-00)	Restricted	Manufacturers of DAP as listed at Export Licensing Note 1 at List B below shall be allowed,with the prior permission of the Department of Fertilizer, to export their own manufactured DAP subject to the following conditions : (i) Intimation to Department of Fertilizer about quantity of export along with a self- declaration and a certificate issued by statutory auditors that no

161	3105 30 00	Kg	Other N.P. Complex Fertilizers of the specifications at Entry	Restricted	concession/ subsidy has been claimed for intended export. (ii) Production of above declaration / certificate as at (i) above to Customs at the time of export. Export permitted under licence
162	3104 20 00	Kg	number 160 above which do not meet the specified conditions for free exports Straight Potassic Fertilizers given below:	Restricted	Exports permitted, with the prior permission of
			Potassium Chloride (Muriate of Potash)		the Department of Fertilizer, by direct importers of MOP out of quantity of import made during last six months subject to the following conditions :-
					(i) They will not claim any concession for the quantity intended to be exported ; or
					(ii) They will return the concession if already claimed from the Government; and
					1. Furnish certificate from the statutory auditors to the Department of Fertilisers and Customs that the quantity intended to be exported has been imported in the last six months and no concession / subsidy has been claimed; and
					2. Export realisation in free foreign exchange only."
163	3104 20 00	Kg	Straight Potassic Fertilizers of the specifications at Entry number 162 above which do not meet the specified conditions for free exports	Restricted	Export permitted under licence

164	3105 40 00 3105 51 00 3105 59 00	Kg	Other N.P. Complex Fertilizers as given below : 1. NP (16-20-0) 2. NP (20-20-0) 3. NP (28-28-0) 4. NP (23-23-0)	Free	Manufacturers of NP and NPK as listed at Export Licensing Note 1 at List C below shall be allowed to export their own manufactured NP and NPK subject to the following conditions : (i) Intimation to Department of Fertilizer about quantity of export along with a self- declaration and a certificate issued by statutory auditors that no concession/ subsidy has been claimed for intended export. (ii) Production of above declaration / certificate as at (i) above to Customs at the time of
165	3105 40 00 3105 51 00 3105 59 00	Kg	Other N.P. Complex Fertilizers of the specifications at Entry number 164 above which do not meet the specified conditions for free exports	Restricted	export. Export permitted under licence
166	3105 20 00	Kg	N.P.K. Complex Fertilisers given below :- Nitrophosphate with Potash (15-15-15) N.P.K. (10-26-26) N.P.K. (12-32-16) N.P.K. (12-32-16) N.P.K. (14-28-14) N.P.K. (14-28-14) N.P.K. (19-19-19) N.P.K. (17-17-17) N.P.K. (15-15-15)	Free	Manufacturers of NP and NPK as listed at Export Licensing Note 1 at List C below shall be allowed to export their own manufactured NP and NPK subject to the following conditions : (i) Intimation to Department of Fertilizer about quantity of export along with a self- declaration and a certificate issued by statutory auditors that no concession/ subsidy has been claimed for intended export. (ii) Production of above declaration / certificate as at (i) above to Customs at the time of
167	3105 20 00	Kg	Other N.P.K. Complex	Restricted	export. Export permitted under

			Fertilizers of the specifications at Entry number 166 above which do not meet the specified conditions for free exports		licence
168	3104 90 00	Kg	All chemical fertilisers	Restricted	Export permitted under
			fortified with zinc or boron		licence
169	3105 90 10	Kg	Micronutirent fertilizers and mixtures thereof containing NPK, excluding those specified in Schedule I, Part A 1 (f) of Fertilizers (Control) Order, 1985	Restricted	Export permitted under licence

Export Licensing Note of Chapter 31

Note 1

List of Manufacturers of SSP , DAP and NP / NPK who can freely export their own manufactures subject to the conditions above.

A List of SSP Manufacturers/Units

S.No.Name of the Unit/location

- 1. Arawali Phosphate Ltd, Jhamarkotra Road, Umra, Udaipur, Rajasthan
- 2. Arihant Fertilizers & Chemicals Ltd, Neemuch Tehsil, Neemuch, M.P.
- 3. Arihant Phosphates and Fertilisers Ltd, Nimbaheda, Chittorgarh, Rajasthan
- 4 Asha Phosphates Ltd, Jaggakhedi, Mandsaur, M.P.
- 5. Basant Agro Tech (India) Ltd, Barshi Takli Tehsil, Akola, Maharashtra
- 6. Bhilai Engineering Corporation Ltd, Gunjkheda, Pulgaon, Wardha, Maharashtra
- 7. Bhilai Engineering Corporation Ltd, Sirgiti Industrial Area, Bilaspur, Chattisgarh
- 8. Bohra Industries Ltd, Umra Village, Girva, Udaipur, Rajasthan
- 9. Chemtech Fertilisers Ltd, Kazipalli, IDA, Medak, Andhra Pradesh
- 10. Coimbatore Pioneer Fertilisers Ltd, Muthugoundanpudur, coimabore, TN
- 11. Dharamsi Morarji Chemical Co Ltd, Ambarnath Tehsil, Thane, Maharashtra

12. Dharamsi Morarji Chemical Co Ltd, Distt. Bilaspur, Chattisgarh

- 13. Dharamsi Morarji Chemical Co Ltd, Khemli, udaipur, Rajasthan
- 14. EID Parry (India) Ltd, Pinji Village, Ranipet, TN
- 15. Gayatri Spinners Ltd, Hamirgarh, Bhilwara, Rajasthan
- 16. Hind Lever Chemicals Ltd, Durgachak, Haldia, Midnapore, W.B.
- 17. Jairam Phosphate Ltd, Wadsa (Desalganj), Gadchiroli, Maharashtra
- 18. Jay Shree Chemicals & Fertilisers-1, Khardah, 24 Praganas (N), W.B.
- 19. Jay Shree Chemicals & Fertilisers-1I, Khardah, 24 Praganas (N), W.B.
- 20. Jubliant Organosys Ltd, Bharatiram, Gajraula, U.P.
- 21. Kashi Uravark Ltd, Industrial Area, Jagdishpur, Sultanpur, U.P.
- 22. Khaitan Chemicals & Fertilisers Ltd, Village Nirmani, Khargone, M.P.
- 23. Khaitan Fertilisers, Rampur, U.P.
- 24. Kothari Industrial Corp. Ltd, Ennore, T.N.
- 25. Krishna Industrial Corp. Ltd, Nidadavola, West Godavari, Distt. A.P.
- 26. Liberty Phosphate Ltd, Mewar Industrial Area, Udaipur, Rajasthan
- 27. Liberty Phosphate Ltd, Nandesari, Vadodara, Gujarat
- 28. Madhya Bharat Agro products Ltd, Sagar, M.P.
- 29. Madhya Pradesh Orgochem Ltd, Jawad Tehsil, Neemuch, M.P.
- 30. Mahadeo Fertilisers Ltd, Bindki, Fatepur, U.P.

31. Maharashtra Agro Industries Dev. Corpn. Ltd, Panvel Taluka, Rigad, Maharashtra

32. Mangalam Phosphates Ltd, Hamirgarh, Bhilwara, Rajasthan

33. Mardia Chemials Ltd, Sitagarh Sayala, Surendranagar, Gujarat

34. Mexican Phosphates Ltd, Ksasrawad Tehsil, Khargone, M.P.

35. Mukteshwar Fertilisers Ltd, Narayankhedi, Ujjain, M.P.

36. Narmada Agro Chemicals P.Ltd. Mangrol, Junagarh, Gujarat

37. Nirma Ltd, Moraiya Village, Bavala, Ahmedabad, Gujarat

38. Phosphate Co. Ltd, Rishra, Hoogly, W.B.

39. Pragati Fertilizers Ltd, IDA, Block-A. Vishakapatnam, A.P.

40. Prathyusha Chemicals & Fertilisers Ltd, IDA, Parawada, Vishakapatnam, A.P.

41. Prem Sakhi Fertilisers Ltd, Jhamar Kotra Road, Lakadwas, Udaipur, Rajasthan

42. Priyanka Fertilisers & Chemicals, Anakapalli (M), Vishakapatnam, A.P.

43. Rashi Fertilizers Ltd., Dindori Tehsil, Nasik, Maharashtra.

44. Rajlaxmi Agrotech India Ltd., Gundewadi Jalna Tehsil, Jalna. Maharashtra.

45 Rama Krishi Rasayan, Haveli Taluka, Pune, Maharashtra.

46 Rama Phosphates Ltd., Dharampuri, Indore, M.P.

47 Rama Phosphates Ltd. Umra, Gurva Tehsil, Udaipur, Rajasthan.

48 Rewati Minerals & Chemicals Ltd., Banda, Tehsil, Sagar, M.P.

49 Sadhana Phosphate & chemicals Ltd., Gudli Village, Udaipur, Rajasthan.

50 Shiva Fertilizers Ltd., Loha, Taluka, Nanded, Maharashtra.

51 Shreeji Phosphate Ltd., Kallipura Village, Jhabua, M.P.

52 Shri Acids and Chemicals Ltd., Gajraula, U.P.

53 Shri Bhawani Mishra (P) Ltd., Wazirabad, Nanded Maharashtra

54 Shri Ganpati Fertilizers Ltd., Gauraji ka Nimbahera, Ambabari, Rajasthan.

55 Shrinivas Fertilizers Ltd, Gormachhia Village, Jhansi, UP

56 Shurvi Colour Chem Ltd., Madsri, Girva Tehsil, Udaipur, Rajasthan

57 Sona Phosphate Ltd, Sarigam, Sabero, Valsad, Gujarat

58 Subhodaya Chemicals Ltd, Gauripatnam, A.P.

59 Swastik Fertilizer & Chemicals Lt, Village Sandla, Dhar, M.P.

60 Tedco Granites Ltyd, Hamirgarh, Bhilwara, Rajasthan

61 Teesta Agro Industries Ltd, Rajganj, Jalpaiguri, W.B.

62 The Andhra Sugars Ltd, Kovvur, West Godavari Distt, A.P.

63 The Bharat Fertilizer Industries Ltd, Wada Taluka, Thane, Maharashtra.

64. Tungabadra Fertilizers & Chemicals Company Ltd, Munirabad R.S. Koppal, Karnataka.

B List of DAP Manufacturers

1. Gujarat State Fertilisers & Chemicals Ltd.

2. Zauri Industries Ltd.

3. Southern Petrochemical Industries Corporation Ltd.

4. Deleted.

5. Oswal Chemicals & Fertilisers Ltd.

6. Madras Fertilisers Ltd., New Delhi-110016

7. M/s Hindalco Industries Limited (unit: birla copper)

8. Indian Farmers Fertilisers Coop. Ltd, New Delli-110019

9. Godavari Fertilisers & Chemical Ltd.

10. Deleted.

11.Deleted

12.M/s Tata Chemicals Limited (Phosphate Business Division), bishop's house, 51, Chowringee Road, Kolkata-700071.

13. Mangalore Chemicals and Fertilisers Ltd, Bhikaji Cama Place, New Delhi.

14. Deleted

15. Paradeep Phosphates Ltd, Pandit Jawaharlal Nehru Marg, Bhubaneshwar-751001

16.FACT, Cochin

17. Deleted.

C. List of NP / NPK Manufacturers

1 M/s Gujarat State Fertilisers & Chemicals Ltd. 6th Floor, Meridien, West Tower, Windsor Place, New Delhi-110001.

2 M/s Zurai Industries Ltd., International Trade Tower, 2nd Floor, F Block, Nehru Place, New Delhi-110019.

3 M/s Southern Petrochemical Industries Corporation Ltd., SPIC House, 842, Asian Games Village Complex, Khel Gaon, August Kranti Marg, New Delhi-110049.

4 M/s Rashtriya Chemical and Fertiliser Ltd., H-9 Green Park Extn., New Delhi.

5 M/s Oswal Chemicals & Fertilisers Ltd., 7th Floor, Antrikash Bhawan, 22, Kasturba Gandhi Marg,New Delhi-110001.

6 M/s Madras Fertilisers Ltd., U-12-A, First Floor, Green Park Extension, New Delhi-110016.

7 M/s Hindalco Industries Limited (unit : birla Copper)

8 M/s Indian Farmers Fertilisers Coop. Ltd., 34, Nehru Place, New Delhi-110019.

9 M/s Godavari Fertilisers & Chemical Ltd., E-198, East of Kailash, New Delhi-110065.

10 M/s E.I. D Parry India Ltd., Jeevan Deep Building, No.10, Sansad Marg, P.B. No.172, New Delhi-110001.

11 M/s Coromondal Fertilizer Ltd. (CFL) Jeevan Deep Building, 1st Floor, 10, Parliament Street, New Delhi-110001.

12 M/s Tata Chemicals Limited (Phosphate Business Division), bishop's house, 51, Chowringee Road, Kolkata-700071.

13 M/s Mangalore Chemicals and Fertilisers Ltd., 1002, Bhikaji Cama Bhawan, Bhikaji Cama Place, New Delhi.

14 M/s Deepak Fertilizers and Petrochemicals Corporation Limited, S-I, First Floor, Panchsheel Park, New Delhi-110017.

15 M/s Paradeep Phosphates Ltd., Bayan Bhawan, Pandit Jawaharlal Nehru Marg, Bhubaneshwar-751001.

16 M/s FACT, Cochin.

17 M/s Gujrat Narmada Valley Fertiliser Company limited, Bharauch.

Chapter 32

Tanning or Dyeing Extracts; Tannings and their Derivatives; Dyes, Pigments and other Colouring Matter; Paints and Varnishes; Putty and other Mastics; Inks

Note 1 Value added products of Red Sanders wood in this chapter require a licence and CITES documentation. For detail, see Chapter 44."

Chapter 33

Essential Oils and Resinoids; Perfumery, Cosmetic or Toilet preparations

Note 1 Sandalwood oil under 3301 29 37 is freely exportable.

S.No	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
170	3301 29 37	Kg	Sandalwood oil	Free	Subject to Quantitative ceilings and conditionalities as may be notified by the Director General of Foreign Trade from time to time. For detail policy see chapter 44

Chapter 35 Albuminoidal substances; modified starches; glues; enzymes

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
171	35030020	Kg	Gelatine, edible grade and not elsewhere specified or included	Free	 Export to EU allowed subject to the following conditions: (j) A 'Shipment Clearance Certificate' is to be issued consignment-wise by the CAPEXIL indicating details of the name and address of the exporter, address of the registered plant, IEC No. of the exporter, plant approval number, nature of export product, quantity, invoice number & date, port of loading (Name of the port) and destination. (ii) After the shipment is made, the exporter shall also provide 'Health Certificate' consignment-wise to the buyer giving details of vessel name, shipping bill number with date, production process, etc. as per the requirement of EU. The Certificate would be issued jointly by CAPEXIL and Regional Animal Quarantine Officer, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India.
172	35030030	Kg	Glues derived from bones, hides & similar items and fish glues	Free	 Export to EU allowed subject to the following conditions: (j) A 'Shipment Clearance Certificate' is to be issued consignment-wise by the CAPEXIL(formerly Chemical & Allied Products Export
173	35040010	Kg	Peptones; others	Free	 Promotion Council) indicating details of the name and address of the exporter, address of the registered plant, IEC No. of the exporter, plant approval number, nature of export product, quantity, invoice number with date, port of loading (Name of the port) and destination. (ii) After the shipment is made, the exporter shall also provide a 'Production Process' certificate and/or' health certificate to the buyer consignment-wise to be issued by CAPEXIL (formerly Chemicals and Allied Products Exports Promotion Council) as per the requirement of EU.

174	3501	Casein, caseinates and other casein	Prohibit ed	Not permitted to be exported
		derivatives;casei n glues		

Export Licensing Note of Chapter 35

Note 1

Transitional arrangements under para 1.5 of Foreign Trade Policy, 2009-14 shall not be applicable on export of casein and casein derivatives.

Note 2

Export consignments of casein and casein derivatives which were handed over to customs for examination and export on or before 18.02.2011 will be allowed for export.

Note 3

Export of excise verified stock of 1053.625 MS of Casein manufactured before 18.02.2011 permitted.

Chapter 38

Miscellaneous Chemical Products

Note 1 Value added products of red sanders wood in this chapter require a licence. For detail, see Chapter 44

Chapter 40

Rubber and Articles thereof

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
175	4014 10 10	u	Condoms except categories /brands mentioned at (a) and (b) below which are not allowed for export	Free	Export freely permitted subject to submission to Customs, a self declaration and a certificate issued by statutory Auditors that no concession/subsidy has been claimed for intended exports nor any subsidized material has been used for manufacture of items under export
			(a) Any condom with any of the following marking/Stamp	Prohibited	Not permitted to be exported.
			i. "Made specially for Govt. of India"; or		
			ii. "Sold under Contraceptiv e Social Marketing Programme of Govt. of India ";		
			iii. "Free supply";		
			iv. "Central Govt. supply- Not for sale"; or		
			v. "Not for export outside India"; and /or		
			(b) the following specific brands of condoms:-	Prohibited	Not permitted to be exported.
			i. Ahsaas ii. Bliss		
			iii. Deluxe Nirodh		

	iv.	Dream
	v.	Masti
	vi.	Milan
	vii.	Mithun
	viii.	Mauj
	ix.	Nirodh
	х.	New Lubricated Nirodh
	xi.	Pick Me
	xii.	Sangam
	xiii.	Super Deluxe Nirodh
	xiv.	Sawan
	XV.	Tamanna
	xvi.	Umang
	xvii.	Ustad
	cviii.	Zaroor
	xix.	Anand
	XX.	Thrill
	xxi.	Sparsh
	xxii.	Sathi

Chapter 41

Raw Hides and Skins (other than Furskins) and leather

Note 1: Finished leather of goat, sheep and bovine animals and of their young ones" means the leather which complies with the terms and conditions specified in the Public Notice of the Government of India in the Ministry of Commerce No.21/2009-14 dated 01.12.2009, under the provisions of the Foreign Trade (Development and Regulation) Act, 1992 (22 of 1992).

S.No.	Tariff item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
176	4104 11 00	Kg	Finished leather all kinds	Free	Subject to the definition of
	4104 19 00				finished leather at Note 1
	4104 41 00				
	4104 49 00				
	4105 10 00				
	4105 30 00				
	4106 21 00				
	4106 22 00				
	4106 31 00				
	4106 32 00				
	4106 40 00				
	4106 91 00				
	4106 92 00				
	4107 11 00				
	4107 12 00				
	4107 19 00				
	4107 91 00				
	4107 92 00				
	4107 99 00				

Export Licensing note of Chapter 41

Note 1

The definition of finished leather is contained in Public Notice No.21/2009-14 dated 01.12.2009. The same is reproduced at Appendix 4 of this schedule.

Chapter 44

Wood and Articles of Wood; Wood Charcoal

Note 1

Definition of handicrafts for the purpose of classification.

(a) A handicraft must be predominantly made by hand. Machinery can also be used in the manufacturing process as a secondary process.

(b) It must be graced with visual appeal in the form of ornamentation or in-lay work or some similar work lending it an element of artistic improvement and such ornamentation must be of a substantial nature and not a mere pretence.

The classification codes for the handicrafts is only illustrative. The description can cover other headings as well.

Note 2

Mulli bamboo (Melocanna baccifera) is Prohibited. For details see chapter 14.

S.No.	Tariff Itrem HS Code	Unit	Item Description	Export Policy	Nature of Restriction
177	4401 10 00 4401 21 00 4401 30 00	mt	Wood and wood products in the form of logs, timber, stumps, roots, bark, chips, powder, flakes, dust, and charcoal other than saion timber made exclusively out of imported logs/timber	Prohibited	Not permitted to be exported
178	4401 10 10 4401 10 90	mt	Fuel wood, in logs, in billets, in twigs, in faggots or in similar forms; Wood in chips or particles; Sawdust and wood waste and scrap, whether or not agglomerated in logs, briquettes, pellets or similar forms	Prohibited	Not permitted to be exported
179	4402 00 10 4402 00 90	mt	Wood charcoal, whether or not agglomerated	Prohibited	Not permitted to be exported
180	4407 10 10 4407 10 20 4407 10 90 4407 29 10 4407 29 90 4407 99 10 4407 99 20 4407 99 90	mt	Wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or end jointed, or a thickness exceeding 6 mm other than sawn timber made exclusively out of imported logs/timber	Prohibited	Not permitted to be exported
181	4407 10 10 4407 10 20 4407 10 90 4407 29 10 4407 29 90 4407 99 10 4407 99 20	mt	Sawn Timber made exclusively out of imported logs/timber of all the species of wood other than CITES Appendix I & II species.	Free	(I) The Export would be confined to the species which has been imported;(ii) The importer and exporter will be the same party/firm and the import

4407 99 90 and export w effected from port. The Scl operational o ports of Chen Kolkata, Mumbai,	heme will be
port. The Scl operational o ports of Cher Kolkata,	heme will be
operational o ports of Cher Kolkata,	
ports of Chen Kolkata,	nuv irom the
Kolkata,	
Mumbai,	Mangalore,
	Mundra,
Nhavasheva	(JNPT),
Tuticorin	and
Visakhapatna	
However, for	
Mangalore a	nd Tuticorin
shall be tre	ated as the
same Por	2
allowing ir	nporters to
import wood	l logs from
Mangalore at	
	ber from
Tuticorin and	d vice-versa.
Similar facili	ty shall also
be available	
Mumbai, M	-
Nhavasheva	
thereby	allowing
importers to	
any of the	
and export ei	
same Port of	
	ining three
Ports.	ling unce
(iii) The exp	ort of sawn
	erived from
imported log	
exceed 609	-
imports in vo	
(iv) The value	
such exports	
less than 30% (v) The Saw	
exporter, wh	
timber is sa	
registered wi	
Forest Depa	
shall be lo	•
from the for	
location appr	
Conservator	
the State Gov	
(vi) The ex	-
undertake ex	
a period of	
from the date	
(vii) The exp	ort contracts
shall be reg	istered with
the Chemical	

182	1211 90 50 4403 99 22	M ³	Sandalwood in any form, but excluding finished	Prohibited	ProductsExportPromotionCouncil(CAPEXIL)who willmonitor them to ensurethat the scheme is notabused.(viii)The laws and rulesframed by the CentralGovernment and the StateGovernment regulatingtimber in transit shall befollowed by the exporters.Not permitted to beexported
			handicraft products of sandalwood, machine finished sandalwood products, sandalwood oil:		
183	4414 00 00 4415 00 00 4419 00 00 4420 00 00 4421 90 60 4421 90 90	Kg	"Finished Handicraft products of(a) Sandalwood(b) Other species	Free	Subject to provisions of CITES Subject to provisions of CITES
184	4409 00 00	Kg	Machine finished sandalwood products	Free	
185	3301 29 37	Kg	Sandalwood Oil	Free	Subject to Quantitative ceilings and conditionalities as may be notified by the Director General of Foreign Trade from time to time.
186	1211 90 50 4401 30 00	mt	Sandalwood De-oiled Spent Dust	Restricted	Export permitted under licence subject to conditionalities as may be notified by the Director General of Foreign Trade from time to time.
187	1211 90 50 4403 99 22		Other forms of sandalwood as specified	Restricted	Export permitted under licence subject to conditionalities as may be notified by the Director General of Foreign Trade from time to time.
188	4403 99 18 4407 99 90	m ³	Red Sanders wood in any form, whether raw, processed or unprocessed , except at (b) below	Prohibited	Not permitted to be exported. The condition stipulated in Column 5 against Sl. No.154(a) of Chapter 44 of Schedule 2 of the "ITC(HS) Classifications of Export and Import Items 1 st September, 2004 – 31 st

	Ι	1			March 2000? 1.11
180	2202.00.00		Value oddod zaodosta of	Destricted	March, 2009" shall be relaxed for a period of one month with effect from the date of issue of export licence to allow export of 354.98 MT of A, B, C and D grades of Red Sanders Wood, in the form of log obtained from Government of Andhra Pradesh through auction.
189	3203 00 90 3805 10 10 9202 10 00 9203 00 10 9203 00 90 9204 10 00 9204 20 00 9206 00 00 9208 10 00 9209 92 00 9209 93 00 9209 99 00	kg	Value added products of Red Sanders wood such as Extracts, Dyes, Musical Instruments and parts of Musical Instruments, made from Redsanders wood, procured from legal sources	Restricted	Exports permitted under licence subject to the following documentation. Applications for export licences should be accompanied by attested copies of certificate of origin issued by the Principal Chief Conservator of Forests of the State from where the stocks were procured, giving details of the date of procurement from legal sources and quantities procured. A Certificate of the current position of stocks so procured and available with the applicant given after physical verification of the stocks, by the authority nominated for the purpose by the Principal Chief Conservator of Forests, should also accompany application for export licence. The applications shall be considered on merits for issue of Export Licence, which shall be subject to any other conditions such as MEP, quantity ceilings requirements under CITES, etc. as may be prescribed from time to time.

Chapter 47

Pulp of Wood or of other Fibrous Cellulosic Material; Waste and Scrap of Paper or Paperboard

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
190	4701 00 00	kg	Mechanical wood pulp	Prohibited	Not permitted to be exported
191	4702 00 00	kg	Chemical wood pulp, dissolving grades	Prohibited	Not permitted to be exported
192	4703 00 00	kg	Chemical wood pulp, soda or sulphate, other than dissolving grades	Prohibited	Not permitted to be exported
193	4704 00 00	kg	Chemical wood pulp, sulphite, other than dissolving grade	Prohibited	Not permitted to be exported
194	4705 00 00	Kg	Semichemical Wood Pulp	Prohibited	Not permitted to be exported
195	4707 00 00	kg	Waste paper	Restricted	Export permitted under licence

Chapter 50

Silk

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
196	5001 00 00	kg	Pure races of Silk worms; silkworm seeds, and silk	Restricted	Export permitted under licence
			worm cocoons		

Chapter 52

COTTON

S. No.	Tariff Item HS Code	Unit	Item of Description	Export Policy	Nature of Restriction
197	5201		Cotton neither carded nor combed	Free	Prior registration of contracts with DGFT.
198	5202		Cotton waste (including yarn waste and garnetted stock)	Free	
199	5203		Cotton, carded or combed	Free	Prior registration of contracts with DGFT.
200	5205	Kgs	Cotton yarn (other than sewing thread), containing 85% or more by weight or cotton not put up for retails sale	Free	The contracts for export of cotton yarn shall be registered with the Directorate General of Foreign Trade prior to shipment. Clearance of cotton yarn consignments shall be given by Customs after verifying that the contracts have been registered.
201	5206	Kgs	Cotton yarn (other than sewing thread), containing less than 85% by weight or cotton not put up for retails sale	Free	
202	5207	Kgs	Cotton yarn (other than sewing thread),put up for retail sale	Free	

Export Licensing Note of Chapter 52

Note 1

Export of 5,000 bales of Assam Comilla Cotton [ITC(HS) Code 52010012] will be exempted from any export restriction during the cotton season 2011-12 (up to 30.09.2012) subject to registration with DGFT.

Chapter 84

Nuclear Reactors, Boilers, Machinery and Mechanical Appliances; Parts thereof

Note 1 Vintage motor cars and vintage motor cycles including their parts and components are restricted. For details please see chapter 87

Chapter 87

Vehicles other than Railway or Tramway Rolling Stock, and Parts and Accessories thereof

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
203	8703 21 10	u	Vintage motor cars, parts	Restricted	Export permitted under
	8703 21 91		and components thereof		licence
	8703 22 10		manufactured prior to		
	8703 22 91		1.1.1950		
	8703 23 91				
	8703 24 10				
	8703 24 91				
	8407 33 10				
	8407 34 10				
	8706 00 11				
	8706 00 39				
	8707 10 00				
	8708 10 90				
	8708 29 00				
	8708 39 00				
	8708 40 00				
	8708 50 00				
	8708 60 00				
	8708 70 00				
	8708 80 00				
	8708 91 00				
	8708 92 00				
	8708 93 00				
	8708 94 00				
	8708 99 00				
204	8711 00 00	u	Vintage Motorcycles,	Restricted	Export permitted under
	8407 31 10		parts and components		licence
	8407 32 10		thereof manufactured		
	8407 33 20		prior to 1.1.1940		
	8714 11 00		-		
	8714 19 00				
	8714 91 00				
	8714 92 90				
	8714 93 90				
	8714 95 90				
	8714 99 90				

Chapter 92

Musical Instruments Parts and Accessories of such articles

Note 1 Value added products of red sanders wood in this chapter require a licence. For detail, see Chapter 44.

Chapter 93 Arms and Ammunition; Parts and Accessories thereof

S.No.	Tariff Item HS Code	Unit	Item Description	Export Policy	Nature of Restriction
205	9302 00 00 9303 00 00 9306 21 00 9306 29 00 9306 30 00 9306 90 00	u	Muzzle loading weapons	Free	 (a) Licence under Arms and Rules framed thereunder; (b) Certificate from the Archaeological Survey of India certifying that the firearms to be exported are not antiques/rare specimens nor manufactured in India prior to 1956; and (c) Firearms to be exported shall bear appropriate marks of identification and proof tests
206	9303 10 00 9306 21 00 9306 29 00 9306 30 00 9306 90 00	u	Weapons and breach loading or bolt action weapons such as shot guns, revolvers, pistols and their ammunition	Free	 (a) Licence under Arms and Rules framed thereunder; (b) Certificate from the Archaeological Survey of India certifying that the firearms to be exported are not antiques/rare specimens nor manufactured in India prior to 1956; and (c) Firearms to be exported shall bear appropriate marks of identification and proof tests

Chapter 96 Miscellaneous Manufactured Articles

Sl. No.	Tariff Item	Unit	Item Description	Export	Nature of Restriction
	HS Code			Policy	
207	9602 00 30	Kg	Empty Gelatin Capsules, not intended for human consumption	Free	Export of the item to EU, produced from Animal By- Products, is allowed subject to the following conditions: (i) A 'Shipment Clearance Certificate' is to be issued consignment-wise by CAPEXIL indicating details of the name and address of the exporter, address of the registered plant, IEC No. of the exporter, plant approval number, nature of export product, quantity, invoice number and date, port of loading (Name of the port) and destination.
					(ii) After the shipment is made, the exporter shall also provide 'Health Certificate' consignment-wise to the buyer giving details of vessel name, shipping bill number with date, production process, etc. as per the regulations stipulated by EC (EU) from time to time. The Certificate would be issued jointly by CAPEXIL and Regional Animal Quarantine Officer, Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India.

Chapter 97 Works of Art, Collectors' Pieces and Antiques

S.No.	HS Code	Unit	Item Description	Export Policy	Nature of Restriction
208	9705 00 90 9706 00 00	u	Replicas of antique weapons	Free	Certificate from the District Magistrate concerned/Commissioner of Police under whose jurisdiction the replica has been manufactured and has been rendered innocuous.

Appendix 1

List of Wild Life entries in Wild Life (Protection) Act, 1972

A. INTRODUCTION

The import and export of Wild Life and its forms is prohibited in the Exim Policy issued under the authority of the Foreign Trade (Development & Regulations) Act, 1992. The generic entry listed in the policy is:

"Wild animals including parts and products and ivory".

Wild animals are those defined in the Wild Life (Protection) Act, 1972.

B. SCHEDULES OF WILD LIFE (PROTECTION) ACT, 1972

The schedule lists and functions under the Act are given in the table below:

Schedule I	Part I	Wild animals listed under Mammals	Covered under definition of Scheduled animal and Scheduled animal articles. Dealing in these along
	Part II	Amphibians and Reptiles	with their articles and trophies is prohibited under
	Part III	Birds	Section 49 of Wild Life (Protection) Act, 1972.
	Part IV	Crustacea and Insects	Hunting of these animals is also Prohibited
Schedule II	Part I	Wild animals listed under Mammals and reptiles	Schedule II, Dealing in Part I Schedule articles requires licence. Part II covered under definition of scheduled animal and scheduled animal articles.
	Part II	Beetles	
Schedule III		Wild animals under mammals	Dealing in these items and animal articles and tropies requires licence. Hunting Prohibited.
Schedule IV		Wild animals under mammals, birds	Dealing in these items and animal articles and tropies requires licence. Hunting Prohibited.
Schedule V		Vermins (Common Crow, Fruit Bats, Mice and Rats living in wild excluded from the definition of Wild Animals.	

Schedule VI	List of plants notified under Section C	Licence from Chief Wild Life Warden for dealing in specified plants. Cultivation also requires a licence
		1

SCHEDULE I of Wild Life Protection Act, 1972

Note: Entries listed with stars ("*") means item has been omitted against the entry number. Part 1 Mammals

1. Andaman wild pig (Sus sorofa andamanensis)]

1-A. Bharal (Ovisnahura)]

1-B. Binturong (Arctictis binturong)]

2. Black Buck (Antelope cervicapra)

2-A. * * *

3. Brow-antlered Deer or Thamin (Cervus eldi)

3-A. Himalayan Brown bear (Ursus Arctos)

3-B. Capped Langur (Presbytis pileatus)

4. Caracal (Felis caracal)

4-A. Catecean specils

5. Cheetah (Acinonyx jubatus)

5-A. Chinese Pangolin (Mainis pentadactyla)

5-B. Chinkara or Indian Gazelle (Gazella gazella bennetti)

6. Clouded Leoparad (Neofelis nebulosa)

6-A. Crab-eating Macaque (Macaca irus umbrosa)

6-B. Desert cat (Felis libyca)

6-C. Desert fox (Vulpes bucapus)

7. Dugong (Dugong dugon)

7-A. Ermine (Mustele erminea)

8. Fishing Cat (Felis Vivian)

8-A. Four-horned antelope (Tetraceros quadricornis)

8-B. * * *

8-C. * * *

8-D. Gangetic dolphin (Platanista gangetica)

8-E. Gaur or Indian bison (Bos gaurus)

9. Golden Cat (Felis temmincki)

10. Golden Langur (Presbytis geei)

10-A. Giant squirrel (Ratufa macroura)

10-B. Himalayan Ibex (Capra ibex)

10-C. Himalayan Tahr (Hemitragus jemlahicus)

11. Hispid Hare (Caprolagus hispidus)

11-A. Hog badger (Arconyx collaris)

12. Hoolock (Hylobates hoolock)

12-A ***

12-B. Indian Elephant (Elephas maximums)

- 13. Indian Lion (Panthera leo persica)
- 14. Indian Wild Ass (Equus hemionus khur)
- 15. Indian Wolf (Canis lupas pallipes)
- 16. Kashmir Stag (Cervus elaphus hanglu)
- 16-A. Leaf Monkey (Presbytis phayrei)
- 16-B. Leopard or Panther (Panthera pardus)]
- 17. Leopard Cat (Felis bengalensis)
- 18. Lesser or Red Panda (Ailurus fulgens)
- 19. Lion-tailed Macaque (Macaca silenus)
- 20. Loris (loris tardigradus)
- 20-A. Little Indian Porpoise (Neomeris phocenoides)
- 21. Lynx (Felix lynx isabellinus)
- 22. Malabar Civet (Viverra megaspila)
- 22-A. Malay or Sun Bear (Helarctos malayanus)
- 23. Mrbled Cat (Felis marmorata)
- 24. Markhor (Capra falconeri)
- 24-A. Mouse Deer (Tragulus meminna)
- 25. Musk Deer (Moschus moschiferus)
- 25-A. Nilgiri Lungur (Presbytis johni)
- 25-B. Nilgiri Tahr (Hemitragus hyclocrius)
- 26. Nyan or Great Tibetan Sheep (Ovis ammon Hodgkin)
- 27. Pallass Cat (Felis manul)
- 28. Pangolin (Manis crassicaudata)
- 29. Pygmy Hog (Sus salvanius)
- 29-A. Ratel (Mellivaora capensis)
- 30. Rhinoceros (Rhinoceros unicornis)
- 31. Rusty spotted Cat (Felis rubiginosa)
- 31-A. Serow (Capricornis sumatraensis)
- 31-B. Clawless Otter (Aonyx cinerea)
- 31-C. Sloth Bear (Melursus ursinus)
- 32. Slow Loris (Nycticebus couceang)
- 32-A. Small Travencore Flying Squirrel (Petinomys fuscocapillus)
- 33. Snow Leopard (Panthera uncia)
- 33-A. Snubfin Dolphin (Oreaella brevezastris)
- 34. Spotted Linsang (Prionodon pardicolor)
- 35. Swamp Deer (All sub-species of Cervus duvauceli)
- 36. Takin or Mishmi Takin (Budorcus taxicolor)
- 36-A. Tibetan Antelope or Chiru (Panthelops hodgsoni)
- 36-B. Tibetan Fox (Vulpes ferrilatus)
- 37. Tibetan Gazelle (Procapra picticaudata)
- 38. Tibetan Wild Ass (Equus hemionus kiang)
- 39. Tiger (Panthera tigris)
- 40. Urial or Shapu (ovis vegnei)
- 41. Wild Buffalo (Bubalus bubalis)
- 41-A. Wild Yak (Bos grunniens)
- 41-B. Tibetan Wolf (Canis lupus chanco)

Part II Amphibians and Reptiles

1. Agra Monitor Lizard Varanus griseus (Daudin)

1-A. * * *

1-B. Audithia Turtle (Pelochelys bibroni)

1-C. Barred, Oval, or Yellow Monitor lizard (Varanus flavescens)

1-D. Crocodiles (Including the Estuarine or salt water crocodiles) (Crocodilus porosus and crocodilus palustris)

1-E. Terrapin (Batagur basika)

1-F. Eastern Hill Terrapin (Melanochelys tricarinata)

2. Gharial (Gravialis gangeticus)

3. Ganges Soft-shelled Turtle (Trionyx gangeticus)

3-A. Golden Gecko (Caloductyloides aureus)

4. Green Sea Turtle (Chelonia Mydas)

5. Hawksbill Turtle (Eretmochelys imbricata inlscata)

6. * * *

7. Indian Egg-eating Snake (Elachistodon westermanni)

8. Indian Soft-shelled Turtle (Lissemys punctata punctata)

9. Iidian Tent Turtle (Kachuga tecta tecta)

9-A. Kerala Forest Terrapin (Hoesemys sylrattca)

10. Large Bengal Monitor Lizard (Varanus bengalensis)

11. Leathery Turtle (Dermochelys coriacea)

12. Logger Head Turtle (Caretta caretta)

13. Olive Back Logger Head Turtle (lepidochelys olivacea)

14. Peacock-marked Soft-shelled Turtle (Trionyx hurum)

14-A. Pythons (Genus python)

14-B. Sail terrapin (Kachuga Kachuga)

14-C. Spotted black Terrapin (Geoclemys hamiltoni)

15. ***

16. ***

17. ***

17-A. Water Lizard (Varanus salvator)

Part III Birds

1. Andaman Teal (Anas gibberifrons allagularis)

1-A. Assam Bamboo Partridge (Bambusicola fytchii)

1-B. Bazas (Aviceda jeordone and Aviceda leuphotes)

1-C. Bengal Florican (Eupodotis bengalensis)

1-D. Black-necked Crane (Grus nigricollis)

1-E. Blood pheasants (Ithaginis cruentus tibetanus, Ithagins Cruentus kuseri) 1-F. ***

2. Cheer Pheasant (Catreus wallichii)

2-A. Eastern White Stork (Ciconia ciconia boyciana)

2-B. Forest-spotted Owlet (Athene blewitti)

2-C. Frogmouths (Genus batrachostomus)

3. Great Indian Bustard (Choriotis nigriceps)

4. Great Indian Hornbill (Buceros bicornis)

4-A. Hawks (Accipitridao)

4-B. Hooded Crane (Grus monacha)

4-C. Hornbills (Ptilolaemus tickelli austeni, Aceros nipalensis, Rhyticeros undulatus ticehursti)

4-D. Houbara Bustard (Chlamydotis undulata)

4-E. Humes Bar-backed pheasant (Syrmaticus humiae)

4-F. Indian pied Hornbill (Anthracoceros malabaricus)

5. Jerdons Courser (Cursorius bitorquatus)

6. Lammergeier (Gypaetus barbatus)

7. Large Falcons (Falco peregrinus, Falco biarmicus and Falco chicuera)

7-A. Large Whistling Teal (Anatidae)

7-B. Lesser Florican (Sypheotides indica)

7-C. Monal Pheasants (Lophophorus impeyanus, Lophophorus Sclateri)

8. Mountain Quail (Ophrysia superciliosa)

9. Narcondam Hornbill [Rhyticeros (undulatus) narcondami)

9-A. ***

10. Nicobar Megapode (Megapodius Freycinet)

10-A. Nicobar Pigeon (Caloenas nicobarica pelewensis)

10-B. Osprey or Fish-eating Eagle (Pandion haliatetus)

10-C. Peacock Pheasants (Polyplectron bicalcaratum)

11. Peafowl (Pavo cristatus)

12. Pink-headed Duck (Rhodonessa caryophyllacea)

13. Scalaters Monal (Lophophorus sclateri)

14. Siberian White Crane (Grus leucogeranus)

14-A. ***

14-B. Tibetan Snow Cock (Tetraogallus tibetanus)

15. Tragopan pheasants (Tragopan melanocephalus, Tragopan blythii, Tragopan satyra, Tragopan temminckii)

16. White-bellied Sea Eagle (Haliaetus leucogaster)

17. White-eared Pheasant (Crossoptilon crossoptilon)

17-A. White Spoonbill (Platalea leucorodia)

18. White-winged Wood Duck (Cairina scutulata)

Part IV Crustacea and Insects

1. Butterflies and Moths

Family Amathusildae	Common English name
Discophora deo deo	Duffer, banded
Discophora sondaica muscina	Duffer, common
Faunis faunula faunuloides	pallid fauna
Family Danaidae	
Danaus gautama gautamoides	Tigers
Euploea crameri nicevillei	Crow, spotted Black
Euploea midamus roepstorfti	Crow, Blue-spotted
Family Lycaenidae	
Allotinus drumila	Darkie, crenulate/Great
Allotinus fabius penormis	Angled darkie
Amblopala avidiena	Hairstrak, Chinese

Amblypodia ace arata Amblypodia alea constanceae Amblypodia ammonariel Amblypodia arvina ardea

Amblypodia asopia Amblypodia comica Amblypodia opalima Amblypodia zeta Biduanda Melisa Cyana Biduanda melisa cyana Callophyrs leechii Castalius rosimon alarbus Charana cepheis Chlioria othona Deudoryx epijarbas amatius Everes moorei Gerydus biggsii Gerydus symethus diopeithes Heliophorus hybrida Horaga albimacula Jamides ferrari Liphyra brassolis Listeria dudgenni Logania Watsoniana subfasciata Lycaenopsis binghami Lycaenopsis haraldus ananga Lycaenopsis puspa prominens Nacaduba noreia hampsoni Polyommatus oritulus leela Pratapa lcetas mishmia Simiskina phalena harterti Sinthusa Virgo Spindasis elwesi Spindasis rukmini Strymoni mackwoodi Tajuria ister Tajuria luculentus nela Tajuria yajna yajna Thecla ataxus zulla Thecla bleti mendera Thecla letha Thecla paona Thecla pavo Virachola smilis Family Nymphalidae

leaf Blue Rosy Oakblue Malayan Bush blue Purple Brown tailless Oakblue

Plain tailless Oakblue Comic Oakblue Opal Oakblue Andaman tailless Oakblue

Blue Posy Hairstreak, Ferruginous Pierrot, common Mandar in Blue, Cachar Tit. orchid Cornelian. scarce Cupid, Moores **Biggs Brownie** Great Brownie Sapphires Onyxes Caeruleans Butterfly, Moth Listers hairstreak Mottle, Watsens Hedge Blue Hedge Blue, Felders Common hedge Blue Lineblue, White-tipped Greenish mountain Blue Royal, dark Blue Brilliant, Broadlanded Spark, pale Silverline, Elwess Silverline, Khaki Hairstreak, Mackwoods Royal, uncertain Royal, Chinese Royal, Chestnut and Black wonderful hairstreak Indian Purple hairstreak Watsons hairstreak paona hairstreak Peacock hairstreak Guava Blues

Apatura ulupi ulupi Argynnis hegemone Callnaga buddha Charases durnfordi nicholi Cirrochroa fasciata Diagora nicevillei Dillpa morgiana Doleschallia bisalltide andamana Eriboea moorel sandakanas Eriboea schreiberi Eulacera manipurensis Euthalia durga splendens Euthalia iva Euthalia khama Curvifascia Euthalia tellehinia Helcyra hermina Hypolimnas missipus Limenitis austenia purpurascens Limenitis zulema Melitaea shandura Neptis antilope Neptis aspasia Neptis columella kankena Neptis cydippe kirbariensis Neptis ebusa ebusa Neptis jumbah binghami Neptis manasa Neptis poona Neptis sankara narr Panthoporia jina jina Panthoporia reta moorei Prothoc franckii regalis Sasakia funebris. Sophisa chandra Symbrenthia silana Vanessa antiopa yedunula **Family Papilionidae** Chilasa cllytea clytea of commixtus Papilio elephenor Papilio liomedon Parnassiusaeco geminifer Parnassius delphius Parnassius hannyngtoni Parnassius imperator augustus Parnassius stoliezkanus Polydorus coon sambilanga

Emperor, Tawny Silver-washed fritillary Freak Rajah, chestnut Yeomen Siren. Scarce Emperor, Golden Austumn leaf Malayan Nawab Blue Nawab Emperor, Tytlers Barons/connis/Duchesses Duke, Grand Duke, Naga Baron, Blue Emperor, White Eggfly, Danaid Commodore, Grey Admirals Fritillaries/Silverstripes Sailer, variegated Sailer, Great Hockeystick Sailer, Short-banded Sailer, Chinese yellow Sailer/Lascar Sailer, chestnut-streaked Sailer, pale Hockeystick Lascar, tytlers Sailer, Broad-banded Bhutan sergeant Malay staff sergeant Begum, Blue Empress Courtier, Eastern Jester, scarce Admirables Common mime Spangle, yellow-crested Swallowtail, Malabar Banded Apollo Banded apollo Hannyngtons apollo Imperial apollo

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Ladakh Banded apollo Common clubtail

Polydorus cerassipes Polydorus hector Polydorus nevilli Polydorus plutonius pembertoni Polydourss polla **Family Pleridae** Aporia harrietae harrietae Baltia butleri sikkima Colias colias thrasibulus Colias dubi Delias samaca Pieris krueperi devta Family Satyriidae Coelitis mothis adamsoni Cyllogenes janetae Elymnias peali Elymbias penanga chilensis Erebia annada annada Erebia nara singha nara singha Lethe, distans Lethe dura gammiel Lethe europa tamuna Lethe gemina gafuri Lethe guluihal guluihal Lethe margaritae Lethe ocellata lyncus Lethe ramadeva Lethe satyabati Mycalesis orseis nautilus Pararge menava maeroides Ypthima dohertyi persimilis 1-A.Coconut or Robber Crab (Bigrus latro) 2. Dragon Fly (Epioplebia laidlawi)

Black windmill Crimson rose Nevills windmill Chinese windmill Deniceylles windmill Black veins White butterfly Clouded yellows Dwarf clouded yellow jezebel, pale Butterfly cabbage/WhiteII Cats eye, Scarce Evening Brown, Scarce Palmfly, peals Palmfly, Painted Argus, ringed Argus, Mottled Forester, Scarce Red Lilacfork, Scarce Bamboo tree brown Taylers tree brown Forester, Dull Tree brown, Bhutan Mystic, dismal Silverstripe, Single Forester, pallid Bushbrown, Purple

Wall dark

Five ring, Great

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SCHEDULE II of Wild Life Protection Act, 1972 Part I

1. *** 1-A. Assamese macaque (Macaca assamensis) 2. Bengal Porcupine (Atherurus mecrourus assamensis) 3. *** 3-A. Bonnet macaque (Macaca radiata) 3-B. **** 4-A. Common langur (Presbytis entellus)] 5. *** 6. *** 7. Ferret Badgers (Melogale moschata, Melogale personata) 8. *** 9. *** 11. Himlayan Crestless Porcupine (Hystrix hodgsoni) 11-A. Himalayan Newtor Salamander (Tyletotriton verrucosus) *** 12. *** 13. *** 14. *** 15. 16. Pig-tailed macaque (Macaca nemestrina) *** 17. 17-A. Rhesus macaque (Macaca mulatta) 18. *** 19. Stump-tailed macaque (Macaca speciosa) 20. *** *** 21. 22. Wild dog or dhole (Cuon alpinus) *** 23. 24. Chameleon (Chameleon calcaratus) Spiny-tailed Lizard or Sanda (Uromastix hardwickii) 25.

Part II

1. Beetles	
FAMILY CARABIDAE	
Agonotrechus andrewesi	Calathus amaroides
Amara brucei	Callistominus belli
Amara eleganfula	Chlaenius championi
Brachinus atripennis	Chlaenius kanarae
Broscosoma gracile	Chlaenius masoni
Brosous bipillifer	Chlaenius nilgiricus
Broter ovicollis	Family chrysomelidae
Acrocrypta rotundata	
Bimala indica	Thauria aliris amplifascia
Clitea indica	
Gopala pita	Family Danaidae

Griva cyanipennis Nisotra cardoni Nisotra madurensis Nisotra nigripennis Nisotra semicoerulea Nisotra striatipennis Nonarthra patkaia Psylliodes plana Psylliodes shira Sebaethe cervina Sebaethe patkaia Sphaeroderma brevicorne Family Cucujidae Carinophlocus raffrayi Cucujus bicolor Cucujus grouvelle Cucujus imperialis Heterojinus semilaetaneus Laemophloeus belli Laemophloeus incertus Pediacus rufipes Family Inopeplidae Inopeplus albonotalus Family Amathueidae Aemona amathusia amathusia Amathusia phildippus andamanicus Amathuxida amythaon amythaon Discophora deo deodoides Discophora lepida lepida Discophora timora andamanensi Enispe cycnus Faunis sumeus assama Sticopthalma nourmahal Artipe eryx Bindahara phocides Bothrinia chennellia Castalius roxus manluena Catapoecilma delicatuma Catapoecilma delicatum Catapoecilma elegans myositina

Charana jalindra Cheritrella truncipennis

Euploea melanaleuca

Family Erycinidae Abisara kausambi Dodona adonira Dodona dipoea Dodona egeon Libythea lepita

Family Hesperiidae Baoris phhidippina Bebasa sena Halpe homilea

Family Lycaenidae allotinus subviolaceus manychus Amblypodia abetrrans Amblypodia agaba aurelia Amblypodia agrata Amblypodia alesia Amblypodia apidanus ahamus

Amblypodia ellisi Amblypodia fulla ignara

Amblypodia genesa watsoni Amblypodia paraganesa zephyreeta Amblypodia paralea Amblypodia silhetensis Amblypodia suffusa suffusa Amblypodia yendava Apharitis lilacinus Araotes lapithis

Chliaria kina Deudoryx hypargyria gaetulia Enchrysops cnejus Everes diporoides Everes kala Helippohorus androcles moorei Horage onyx Horage viola Hypolycaena nilgirica Hypolycaena thecloides nicobarica Iraota rochana boswelliana Jamides alectokandulana Jamides celeodus pura Jamides coeruler Jamides kankena Lampides boeticus Lilacea albocaerulea Lilacea atroguttata Lilacea lilacea Lilacea melaena Lilacea minima Logania massalia Lycaenesthes lycaenina Mahathala ameria Mahathala atkinsoni Magisba malaya presbyter Nacaduba aluta coelestis Nacaduba ancyra aberrans Nacaduba dubiosa fulva Nacaduba helicon Nacaduba hermus major Nacaduba pactolus Neucheritra febronia Niphanda cymbia Orthomiella pontis Pithecops fulgens Polymmatus devanica devanica Polymmatus metallica metallica Polymmatus orbitulus jaloka Polymmatus yeonghusbandi Poritia erycinoides elsiei Poritia hewitsoni Poritia plsurata geta Pratapa bhetes Pratapa blanka Pratapa deva Pratapa icetas

Rapala buxaria Rapala chandrana chandrana Rapala nasaka Rapala refulgens Rapala rubida Rapala scintilla Rapala sphinx sphinx Rapala varuna Spindasis elima elima Spindasis lohita Spindasis nipalicus Suasa lisides Surendra todara Tajuria albiplaga Tajuria cippus cippus Tajuria culta Tajuria diaeus Tajuria illurgioides Tajuria illurgis Tajuria jangala andamaniaca Tajuria melastigma Tajuria sebonga Tajuria thyia Tajuria yajna istroides Tarucus callinara Tarucus dharta Thaduka malticaudata kanara Thecla ataxus ataxus Thecla bitel Thecla icana Thecla jakamensis Thecla kabreea Thecla khasia Thecla kirbariensis Thecla suroia Thecla vittata Thecla ziba Thecla zoa Thecla zsta Una usta Yasoda tripunctata FAMILY NYMPHALIDAE Adolias cyanipardus Adolias dirtea Adolias khasiana Apatura chevana Apatura parvata

Apatura sordida Apatura ulupi florenciae Argynnis adippe pallida Argynnis altissima Argynnis altissima Argynnis clara clara Argynnis pales horla Atella alciope Calinaga buddha brahaman Charaxes aristogiton Charaxes fabius sulphureus Charaxes karruba Charaxes marmax Charaxes polyxena heman Cheroobnesia rahria rahrioides Cyrestis cocles Diagora persimilis Doleschallia bisaltide malabarica Eriboea athames and amanicus Eriboea delphis Eriboea dolen Eriboea harcoea lissainei Euripus consimilis Euripus halithereses Euthalia anosia Euthalia cocytus Euthalia duda Euthalia durga durga Euthalia evalina landabilis Euthalia franciae Euthalia garuda acontius Euthalia lepidea Euthalia merta eriphyle Euthalia nara nara Euthalia patala taooana Euthalia teuta Horona marathus andamana Hypolimnas missipus Hypolimnas polynice birmana Kallima albofasciata Kallima alompra Kallima philarchus horsfieldii Limenitis austenia austenia Limenitis damava Limenitis dudu Melitaea robertsi lutko Neptis Aurelia

Neptis anjana nashona Neptis Aurelia Neptis magadh khasiana Neptis nandina hamsoni Neptis narayana Neptis radha radha Neptis soma Neptis zaida Neurosigma doublodayi doubledayi Pantoporia ksura ksura Pantoporia kanwa phorkys Pantoporia larymna siamensis Pantoporia paravara acutipennis Pantoporia ranga Parthenos Sylvia Penthema lisarda Symbrenthia niphanda Vanesa egea agnicula Vanesa lalbum Vanesa pollychloros fervida Vanesa prarsoides dohertyi Vanesa urticie rizama Family Papilionidae Bhutanitis liderdalei liderdalei Chilasa epycides epycides Chilasa paradoxa telearchus Chilasa slateri slateri Graphium aristeus anticrates Graphium arycles arycles Graphium eurypylus macronius Graphium evemon albociliates Graphium gyas gyas Graphium megarus megarus Papilio bootes Papilio Buddha Papilio fuscus andamanicus Papillio machaon verityi Papilio mayo Parnassius charltonius charltonius Parnassius epaphus hillensis Parnassius jacquemonti jacquemonti Polydorus latreillei kabrua Polydorus plutonius tytleri Teinopalppus imperialis imperialis Family Pieridae Aporia nabellica Appias albina darada

Appias indra shiva Appias lyncida latifasciata Appias wardi Baltia butleri butleri Cepora nadian remaba Cepora nerissa dapha Colias ecocandiea hinducucica Colias eogene Colias ladakensis Colias stoliczkana Miranda Delias lativitta Dercas lycorias Euchloe charlonia lucilla Eurema andersoni ormistoni Metaporia agathon Pieris deota Pontia chloridice alipina Saletara panda Chrysaea Valeria avatar avatar Family Satyridae Anlocera brahminus Cyllogenes suradeva Elymnias malelas milamba Ellymnias vasudeva Erebia annada suroia Erebia hygriva Erebia kalinda kalinda Erebia mani mani Erebia seanda opima Erites falcipennis Hipparchis hoydenreichi shandura Lethe atkinsoni Lethe baladeva Lethe goalpara goalpara Lethe insana insane Lethe jalurida Lethe kaubra Lethe latiaris latiaris Lethe moelleri moelleri Lethe naga naga Lethe nicetella Lethe pulaha Lethe scanda Lethe serbonis Lethe siderca Lethe sincrix Lethe tristigmata

Lethe violaceopicta kanjupkula Lethe visrava Lethe yama Maniola davendra davendra

Maniola zitenius

Mycalesis adamsoni

Mycalesis anaxias

Mycalesis qotama chamka Mycalesis heri

Mycalesis lepcha bethami

Mycalesis malsarida

Mycalesis mestra

Mycalesis misenus

Mycalesis mystes

Mycalesis suavolens

Neorina Hilda Neorina patria westwoodii

Oeneis buddha quaurhwalica

Parantirrhoea marshali

Pararge eversmanni cash mirensis

Pararge maerula maefula

Ragadia crislda crito

Rhapicera sttriens kabrua

Ypthima bolanica

Ypthima lycus lycus

Ypthima mathora mathora Ypthima similis affectata

Zipotis saitis

1-A. Civets (all species of Viverridae except Malabar civet)

1-B. Common fox (Vulpes bengalensis)

1-C. Flying squirrels (all species of the genera Bulopetes, Petaurista, Pelomys, and Eupetaurus)

1-D. Giant squirrels (Ratufa macroura Ratufa indica, and Ratufa bicolor)]

2. Himalayan brown bear (Ursus arctos)

2-A. Himalayan black bear (Selenarctos thibetanus)

2-B. Jackal (Canis aureus)

2-C. Jungle cat (Felis chaus)

2-D. Marmots (marmota bobak himalayana, Marmota caudata)

2-E. Martens (Martes foria intermedia, Martes flovigule, Martes gwatkinsii)

3. ***

4. Otters (Luthra, L. Perspicillata)

4-A. Pole cats (Vormela peregusna, Mustila poturius)

4-B. Red fox (Vulpes vulpes, vulpes montana, vulpes griffithi, vulpes pusilla)

5. Sloth bear (Melursus ursinus)

5-A. Sperm whale (Physeter macrocephalus)

6. ***

7. Weasels (Mustela sibirica, Mustela Kathian, Mustela altaica)

8. Checkered keelback snake (Xenochrophis Piscatar)

- 9. Dhaman or rat snake (Plyas mucosus)
- 10. Dog-faced water snake (Carbrus rhynchops)
- 11. Indian cobras (all sub-species belonging to genus Naja)
- 12. King cobra (Ophiophagus hannah)
- 13. Oliveceous keelback (Artaetium schistosum)
- 14. Russels viper (Vipera ruselli)
- 15. Varanus species (excluding yellow monitor lizard)

SCHEDULE III of Wild Life Protection Act, 1962

1.	***
2.	Barking deer or muntjac (Muntiacus muntjak)
3.	***
4.	***
5.	Chital (axix axis)
6.	***
7.	Gorals (Nemorhaedus goral, Nemorhaedus hodgsoni)
8.	***
9.	***
10.	***
11.	Hogdeer (Axis porcinus)
12.	Hyaena (Hyaena hyaena)
13.	***
14.	Nilgai (Boselaphus tragocamelus)
15.	***
16.	Sambar (Cervus unicolor)
17.	***
18.	***
19.	Wild pig (Sus scrofa)

SCHEDULE IV of Wild Life Protection Act, 1962

1. *** 1-A. *** 2. *** 3. *** 3-A. Five-striped palm squirrel (Funambulus pennanti) 4. Hares (Black Naped, Common Indian, Desert, Himalayan mouse hare) 4-A. Hedge hog (Hemiechinus auritus) 4-B. *** 4-C. *** 4-D. *** 4-E. Indian porcupine (Hystrix indica) 5. *** 6. *** 6-A. Mongooses (All species of genus Herpestes) 6-B. *** 7. *** 7-A. Pole cats (Vormela peregusna, Mustela Putorius) 7-B. *** 8. *** 8-A. *** 9. *** 9-A. *** 10. *** 11. Birds (Other than those which appear in other Schedules)

- 1. Avadavat (Estrildinae)
- 2. Avocet (Recurvirostridae)
- 3. Babblers (Timaliinae)
- 4. Barbets (Capitonidae)
- 5. Barnowls (Tytonknae)
- 6. Bitterns (Ardeidae)
- 7. Brown-headed gull (larus brunnicephalus)
- 8. Bulbuls (Pycnonotidae)
- 9. Buntings (Emberizidae)
- 10. Bustorda (Otididae)
- 11. Bustard-Qualis (Turnicidae)
- 12. Chloropsis (Irenidae)
- 13. Comb duck (Sarkidiornis melanotes)
- 14. Coots (Rallidae)
- 15. Cormorants (Phalacrocoracidie)
- 16. Cranes (Gruidae)
- 17. Cuckoos (Cuculidae)
- 17-A. Curlews (Seoalopacinae)
- 18. Darters (Phalacrocoracidae)
- 19. Doves including the emerald Dove (Columbidae)
- 20. Drongos (Dicruridae)
- 21. Ducks (Anatidae)
- 22. Egrets (Ardeidae)
- 23. Fairy Blue Birds (Irenidae)
- 24.Falcons (Falconidae), excepting the shaheen and Peregrine falcons (Falco Peregrinus), the shaker or chorrug, shanghar and lagger falcons (F.biarmicus), and the redheaded merlin (F. chicquera)
- 25. Finches including the chaffinch (Fringillidae)
- 26. Falmingos (Phoenicopteridae)
- 27. Flowerpeckers (Dicaeidae)
- 28. Flycatchers (Muscicapidae)
- 29. Geese (anatidae)
- 30. Goldfinch and allies (Carduelinae)
- 31. Grebes (Pooicipididae)
- 32. Gerons (Ardeidae)
- 33. Ibises (Thereskiornithidae)
- 34. Iorars (Irenidae)
- 35. Jays (Corvidae)
- 36. Jacanas (Jacanidae)
- 36-A. junglefowl (Phasianidae)
- 37. Kingfishers (Alcedinidae)
- 38. Larks (Alaudidae)
- 39. Lorikeets (Psittacidae)
- 40. Magpies including the Hunting magpie (Corvidae)
- 41. Mannikins (Estrildinae)
- 42. Megapodes (Megapodidae)
- 43. Minivets (Campephagidae)
- 44. Munis (Estrildinae)

45. Mynas (Sturnidae)

46. Nightjara (Caprimalgidae)

47. Orioles (Oriolidae)

48. Owls (Strigidae)

49. Oystercatchers (Haematopodidae)

50. Parakeets (Psittacidae)

51. Partridges (Phasianidae)

52. Pelicans (Pelecanidae)

53. Pheasants (Phasiandae)

54. Pigeons (Columbidae) except the Blue Rock Pigeon (Columba livia)

55. Pipits (Motacillidae)

55-A. Pittas (Pittidae)

56. Plovers (Charadriinae)

57. Quails (rhasianidae)

58. Rails (Rhasianidae)

59. Rollers or Blue jays (Coraciidae)

60. Sandgrouses (Pteroclididae)

61. Sandpipers (Scolopacinae)

62. Snipes (Scolopacinae)

63. Spurfowls (Phasianidae)

64. Starlings (Sturnidae)

65. Stone Curlew (Burhinidae)

66. Storks (Ciconiidae)

67. Stilts (Recurvirostridae)

68. Sunbirds (Nectariniidae)

69. Swans (Anatidae)

70. Teals (Anatidae)

71. Thurushes (turadinae)

72. Tits (Paridae)

73. Tree pies (Corvidae)

74. Trogons (Trogonidae)

75. Vultures (Accipitridae)

76. Waxbills (Extrildinae)

77. Weaver Birds or bayas (Ploceidae)

78. White -eyes (Zosteropidesa)

79. Woodpeckers (Picidae)

80. Wrens (Troglodytidae)

12. Snakes other than those species listed in Sch.I, Pt.II; and Sch.II, Pt.II

(i) Amblycaphalidae

(ii) Amilidae

(iii) Boidae

(iv) Colubridae

(v)Dasypeptidae (Egg-eating snakes)

(vi) Elapidae (cobras, Kraits, and Coral Snakes)

(vii) Glauconndae

(viii) Hydrophidae (Fresh water and sea snakes)

(ix) Tlysiidae

(x)Leptotyphlopidae

- (xi) Typhlopidae
- (xii) Uropelotidae
- (xiii) Viperidae
- (xiv) Xenopeltidae]
- 13. Fresh Water Frogs (Rana spp.)
- 14. Three-keeled Turtle (Geoemydas tricarinata)
- 15. Tortoise (Testudinidae, Tryonychidae)
- 16. Vivipaous toads (Nectophyrynoides sp.)
- 17. Voles
- 18. Butterflies and Moths

Family Danaidae

Euploca core simulatrix

Euploca crassa

Euploca dioclctianus ramsayi

Euploca muleiber

Family Hesperilidae

Baoris farri

- Hasora vitta
- Hyarotis adrastus
- Oriens concinna
- Pelopipidas assamensis
- Pelopidas sinensis
- Polytrema discreta
- Polytrema rubricans
- Thoressa horiorei
- Family Lycaenidae
- Tarucus ananda
- Family Nymphalidae
- Aporia agathon ariaca
- Appias libythea
- Appiad nero galba

Prioneris sita

SCHEDULE V of Wild Life Protection Act, 1962

Common crow

 Fruit bats

- 4.***
- 5. Mice

6. Rats

7 ***

SCHEDULE VI of Wild Life Protection Act, 1962

(See Section 2)

1. Beddomes cycad (Cycas beddomei)

- 2. Blue Vanda (Vanda soerulec)
- 3. Kuth (Saussurea lappa)
- 4. Ladies sliper orchids (Paphiopedilum spp.)
- 5. Pitcher plant (Nepenthes khasiana)
- 6. Red Vanda (Rananthera imschootiana)

Appendix 2

Appendix I (Prohibited Species) and Appendix II (Endangered Species) of Convention on International Trade in Endangered Species of Wild Flora (CITES)

Appendix I	Appendix II
F	L O R A (PLANTS)
AGAVACEAE Agaves	
Agave arizonica	
Agave parviflora	
Agave victoriae-reginae #1	
Nolina interrata	
AMARYLLIDACEAE Snowdrops, sternbe	ergias
	Galanthus spp. #1
	Sternbergia spp. #1
APOCYNACEAE Elephant trunks	
Pachypodium spp. #1 (Except the species in	ncluded in Appendix I)
Pachypodium ambongense	
Pachypodium baronii	
Pachypodium decaryi	
	Rauvolfia serpentina #2
ARALIACEAE Ginseng	
Panax ginseng #3 (Only the population of t Appendices)	he Russian Federation; no other population is included in the
	Panax quinquefolius #3
ARAUCARIACEAE Monkey-puzzle tree	
Araucaria araucana	
BERBERIDACEAE May-apple	
Podophyllum hexandrum #2	
BROMELIACEAE Air plants, bromelias	
	Tillandsia harrisii #1
	Tillandsia kammii #1
	Tillandsia kautskyi #1
	Tillandsia mauryana #1
Tillandsia sprengeliana #1	
	Tillandsia sucrei #1
Tillandsia xerographica #1	
CACTACEAE Cacti	
CACTACEAE spp. ⁷ #4 (Except the specie	s included in Appendix I)
Ariocarpus spp.	
Astrophytum asterias	
Aztekium ritteri	
Coryphantha werdermannii	
Discocactus spp.	

Echinocereus ferreirianus ssp. lindsayi Echinocereus schmollii Escobaria minima Escobaria sneedii Mammillaria pectinifera Mammillaria solisioides Melocactus conoideus Melocactus deinacanthus Melocactus glaucescens Melocactus paucispinus Obregonia denegrii Pachycereus militaris Pediocactus bradyi Pediocactus knowltonii Pediocactus paradinei Pediocactus peeblesianus Pediocactus sileri Pelecyphora spp. Sclerocactus brevihamatus ssp. tobuschii Sclerocactus erectocentrus Sclerocactus glaucus Sclerocactus mariposensis Sclerocactus mesae-verdae Sclerocactus nyensis Sclerocactus papyracanthus Sclerocactus pubispinus Sclerocactus wrightiae Strombocactus spp. Turbinicarpus spp. Uebelmannia spp. CARYOCARACEAE Ajo Caryocar costaricense #1 COMPOSITAE (Asteraceae) Kuth Saussurea costus CRASSULACEAE Dudleyas Dudleya stolonifera Dudleya traskiae CUPRESSACEAE Alerce, cypresses Fitzroya cupressoides Pilgerodendron uviferum CYATHEACEAE Tree-ferns Cyathea spp. #1 CYCADACEAE Cycads CYCADACEAE spp. #1 Cycas beddomei **DIAPENSIACEAE** Oconee-bells Shortia galacifolia #1

DICKSONIACEAE Tree-ferns Cibotium barometz #1 Dicksonia spp. #1 (Only the populations of the Americas; no other population is included in the Appendices) DIDIEREACEAE Alluaudias, didiereas DIDIEREACEAE spp. #1 DIOSCOREACEAE Elephant's foot, kniss Dioscorea deltoidea #1 DROSERACEAE Venus' flytrap Dionaea muscipula #1 **EUPHORBIACEAE** Spurges Euphorbia spp. #1 (Except the species included in Appendix I; succulent species only; artificially propagated specimens of cultivars of Euphorbia trigona are not subject to the provisions of the Convention) Euphorbia ambovombensis Euphorbia capsaintemariensis Euphorbia cremersii (Includes the forma viridifolia and the var. rakotozafyi) Euphorbia cylindrifolia (Includes the spp. tuberifera) Euphorbia decaryi (Includes the vars. ampanihyenis, robinsonii and spirosticha) Euphorbia francoisii Euphorbia moratii (Includes the vars. antsingiensis, bemarahensis and multiflora) Euphorbia parvicyathophora Euphorbia quartziticola Euphorbia tulearensis FOUQUIERIACEAE Ocotillos Fouquieria columnaris #1 Fouquieria fasciculata Fouquieria purpusii **GNETACEAE** Gnetums JUGLANDACEAE Gavilan Oreomunnea pterocarpa #1 LEGUMINOSAE (Fabaceae) Afrormosia, cristobal, rosewood, sandalwood Dalbergia nigra Pericopsis elata #5 Platymiscium pleiostachyum #1 Pterocarpus santalinus #7 LILIACEAE Aloes Aloe spp. #1 (Except the species included in Appendix I. Also excludes Aloe vera, also referenced as Aloe barbadensis which is not included in the Appendices) Aloe albida Aloe albiflora Aloe alfredii Aloe bakeri

Aloe bellatula

Aloe calcairophila Aloe compressa (Includes the vars. rugosquamosa, schistophila and paucituberculata) Aloe delphinensis Aloe descoingsii Aloe fragilis Aloe haworthioides (Includes the var. aurantiaca) Aloe helenae Aloe laeta (Includes the var. maniaensis) Aloe parallelifolia Aloe parvula Aloe pillansii Aloe polyphylla Aloe rauhii Aloe suzannae Aloe versicolor Aloe vossii MAGNOLIACEAE Magnolia MELIACEAE Mahoganies, Spanish cedar Swietenia humilis #1 Swietenia macrophylla #6 (Populations of the Neotropics) [Enters into effect on 15 November 2003] Swietenia mahagoni #5 NEPENTHACEAE Pitcher-plants (Old World) Nepenthes spp. #1 Nepenthes khasiana Nepenthes rajah **ORCHIDACEAE** Orchids ORCHIDACEAE spp. 8 #8 (Except the species included in Appendix I) (For all of the following Appendix-I species, seedling or tissue cultures obtained in vitro, in solid or liquid media, transported in sterile containers are not subject to the provisions of the Convention) Aerangis ellisii Cattleya trianaei Dendrobium cruentum Laelia jongheana Laelia lobata Paphiopedilum spp. Peristeria elata Phragmipedium spp. Renanthera imschootiana Vanda coerulea **OROBANCHACEAE** Broomrape

	Cistanche deserticola
PALMAE (Arecaceae) Palms	
	Beccariophoenix madagascariensis
Chrysalidocarpus decipiens #1	· · · · · · ·
	Lemurophoenix halleuxii
	Marojejya darianii
	Neodypsis decaryi #1 Ravenea louvelii
	Ravenea louvelli Ravenea rivularis
	Satranala decussilvae
	Voanioala gerardii
PAPAVERACEAE Poppy	voanioara gerarun
PINACEAE Guatemala fir	
Abies guatemalensis	
PODOCARPACEAE Podocarps	
Podocarpus parlatorei	
PORTULACACEAE Lewisias, portulacas, purslar	ies
	Anacampseros spp. #1
	Avonia spp. #1
	Lewisia serrata #1
PRIMULACEAE Cyclamens	
	Cyclamen spp. 9 #1
PROTEACEAE Proteas	
	Orothamnus zeyheri #1
	Protea odorata #1
RANUNCULACEAE Golden seals, yellow adonis	
	Adonis vernalis #2
	Hydrastis canadensis #3
ROSACEAE African cherry, stinkwood	
	Prunus africana #1
RUBIACEAE Ayuque	
Balmea stormiae SARRACENIACEAE Pitcher-plants (New World)	
Sarracenia spp. #1 (Except the species included in	
Sarracenia spp. #1 (Except the species included in Sarracenia rubra	Appendix I)
ssp. alabamensis	
Sarracenia rubra ssp. jonesii	
Sarracenia oreophila	
SCROPHULARIACEAE Kutki	
Picrorhiza kurrooa #3 (Excludes Picrorhiza scroph	ulariiflora)
STANGERIACEAE Stangerias	
	Bowenia spp. #1
Stangeria eriopus	
TAXACEAE Himalayan yew	
	Taxus wallichiana #2
TROCHODENDRACEAE (Tetracentraceae) Tetracentron	

THYMELAEACEAE (Aquilariaceae) Agarwood, ramin

Aquilaria malaccensis #1 VALERIANACEAE Himalayan spikenard Nardostachys grandiflora #3 WELWITSCHIACEAE Welwitschia Welwitschia mirabilis #1 ZAMIACEAE Cycads ZAMIACEAE spp. #1 (Except the species included in Appendix I) Ceratozamia spp

Ceratozamia spp. Chigua spp. Encephalartos spp. Microcycas calocoma ZINGIBERACEAE Ginger lily Hedychium philippinense #1 ZYGOPHYLLACEAE Lignum-vitae

Guaiacum spp. #2

APPENDIX-3

Special Chemicals, Organisms, Materials, Equipment and Technologies (SCOMET) export of which is regulated

Export of Special Chemicals, Organisms, Materials, Equipment and Technologies (SCOMET) listed below shall be permitted only against an export licence issued in this behalf unless export is prohibited or is permitted without licence subject to fulfillment of conditions, if any, as indicated under/against any specific category or item.

Provisions of Chapter IV A of the FT(D&R) Act,1992 as amended in 2010 shall apply to the goods, services and technologies as specified in the list below.

Supply of SCOMET Items from DTA to SEZ

No export permission is required for supply of SCOMET items from DTA to SEZ. However, all supplies of SCOMET items from DTA to SEZ will be reported to the Development Commissioner of the respective SEZ by the supplier in the prescribed proforma (Annexure 1) within one (1) week of the supplies getting effected. An annual report of such supplies from DTA to SEZ shall be sent to SCOMET Cell, DGFT (Hqrs), Department of Commerce, Udyog Bhawan, Maulana Azad Road, New Delhi-110011, by the Development Commissioner (DC), SEZ in the prescribed proforma (Annexure 2). Report by the DC, SEZ to be filed by 15th May of every financial year for the supplies effected during the preceding financial year.

Export of SCOMET Items from SEZ to outside the country

Export permission is required if the SCOMET items are to be physically exported outside the country from SEZ i.e. to another country (Refer Rule 26 of the SEZ Rules, 2006).

(Inserted vide Notification No.93(RE-2010)/2009-14 dated 6.1.2012)

It is mandatory for all companies and their subsidiaries registered in India and all other business entities operating in India and involved in the manufacture, processing and use of Special Chemicals, Organisms, Materials, Equipment and Technologies (SCOMET) listed below to obtain permission of the Central Government before entering into any arrangement or understanding that involves an obligation to facilitate or undertake site visits, on-site verification or access to records/ documentation, by foreign Governments or foreign third parties, either acting directly or through an Indian party or parties. Requests for such permissions shall be considered in the manner in which requests for export/import licence are considered.

Provided that where obligations involving site visits, on-site verification or access to records/ documentation by foreign governments or foreign third parties are to be undertaken pursuant to a bilateral agreement or a multilateral treaty to which India is a party, the provisions of the relevant agreement or treaty shall apply.

Exporters are advised to refer to the relevant guidelines relating to the export of SCOMET items in the Handbook of Procedures (Vol.I), as issued from time to time.

Glossary: Expressions used in the SCOMET List have the following meanings:

"Accuracy" usually measured in terms of inaccuracy, means the maximum deviation, positive or negative, of an indicated value from an accepted standard or true value.

"Active flight control systems" are systems that function to prevent undesirable "aircraft" and missile motions or structural loads by autonomously processing outputs from multiple sensors and then providing necessary preventive commands to effect automatic control.

"Aircraft": A fixed wing, swivel wing, rotary wing (helicopter), tilt rotor or tilt-wing airborne vehicle.

"Angular position deviation" means the maximum difference between angular position and the actual, very accurately measured angular position after the work piece mount of the table has been turned out of its initial position.

"Composite" means a "matrix" and an additional phase or additional phases consisting of particles, whiskers, fibres or any combination thereof, present for a specific purpose or purposes.

"Composite theoretical performance" ("CTP") is a measure of computational performance given in millions of theoretical operations per second (Mtops), calculated using the aggregation of computing elements (CE).

"Contouring control" means two or more "numerically controlled" motions operating in accordance with instructions that specify the next required position and the required feed rates to that position. These feed rates are varied in relation to each other so that a desired contour is generated.

"CTP" is equivalent to "composite theoretical performance.

"Designed or modified" describes equipment, parts or components which, as a result of "development," or modification, have become endowed with specified properties that make them fit for a particular application.

"Development": Activity related to all phases prior to "production" such as design, design research, design analysis, design concepts, assembly and testing of prototypes, pilot production schemes, design data, process of transforming design data into a product, configuration design, integration design, layouts.

"Digital computer" means equipment which can, in the form of one or more discrete variables, perform all of the following:

a. Accept data;

b. Store data or instructions in fixed or alterable (writable) storage devices;

- c. Process data by means of a stored sequence of instructions which is modifiable; and
- d. Provide output of data.

N.B.: Modifications of a stored sequence of instructions include replacement of fixed storage devices, but not a physical change in wiring or interconnections.

"Explosives": Solid, liquid or gaseous substances or mixtures of substances which, in their application as primary, booster, or main charges in warheads, demolition and other applications, are required to detonate.

"Fibrous or filamentary materials" include:

- a. Continuous "monofilaments";
- b. Continuous "yarns" and "rovings";
- c. "Tapes", fabrics, random mats and braids;
- d. Chopped fibres, staple fibres and coherent fibre blankets;
- e. Whiskers, either monocrystalline or polycrystalline, of any length;
- f. Aromatic polyamide pulp.

"Hybrid computer" means equipment which can perform all of the following:

a. Accept data;

b. Process data, in both analogue and digital representations; and

c. Provide output of data.

"Image enhancement" means the processing of externally derived information-bearing

images by algorithms such as time compression, filtering, extraction, selection, correlation, convolution or transformations between domains (e.g., fast Fourier transform or Walsh transform). This does not include algorithms using only linear or rotational transformation of a single image, such as translation, feature extraction, registration or false coloration.

"Information security" is all the means and functions ensuring the accessibility, confidentiality or integrity of information or communications, excluding the means and functions intended to safeguard against malfunctions. This includes cryptography, 'cryptanalysis', protection against compromising emanations and computer security.

N.B.: 'Cryptanalysis': analysis of a cryptographic system or its inputs and outputs to derive confidential variables or sensitive data, including clear text.

"Insulation" is applied to the components of a rocket motor, i.e. the case, nozzle, inlets, case closures, and includes cured or semi-cured compounded rubber sheet stock containing an insulating or refractory material. It may also be incorporated as stress relief boots or flaps.

"Interior lining" is suited for the bond interface between the solid propellant and the case or insulating liner. Usually a liquid polymer based dispersion of refractory or insulating materials, e.g. carbon filled hydroxyl terminated polybutadiene (HTPB) or other polymer with added curing agents sprayed or screeded over a case interior.

"Isolated live cultures" includes live cultures in dormant form and in dried preparations.

"Isostatic presses" mean equipment capable of pressurising a closed cavity through various media (gas, liquid, solid particles, etc.) to create equal pressure in all directions within the cavity upon a workpiece or material.

"Laser": An assembly of components which produce both spatially and temporally coherent light that is amplified by stimulated emission of radiation.

"Linearity" (usually measured in terms of non-linearity) means the maximum deviation of the actual characteristic (average of upscale and downscale readings), positive or negative, from a straight line so positioned as to equalise and minimise the maximum deviations.

"Matrix" means a substantially continuous phase that fills the space between particles, whiskers or fibres.

"Measurement uncertainty" is the characteristic parameter which specifies in what range around the output value the correct value of the measurable variable lies with a confidence level of 95 %. It includes the uncorrected systematic deviations, the uncorrected backlash and the random deviations.

"Microcircuit": A device in which a number of passive and/or active elements are considered as indivisibly associated on or within a continuous structure to perform the function of a circuit.

"Microprogrammes": A sequence of elementary instructions maintained in a special storage, the execution of which is initiated by the introduction of its reference instruction register.

"Missiles" means complete rocket systems and unmanned aerial vehicle systems.

"Modified" in the context of "software" describes "software" which has been intentionally changed such

that it has properties that make it fit for specified purposes or applications. Its properties may also make it suitable for purposes or applications other than those for which it was "modified."

"Monofilament" or filament is the smallest increment of fibre, usually several micrometres in diameter.

"Monolithic integrated circuit" means a combination of passive or active 'circuit elements' or both which:

- a. Are formed by means of diffusion processes, implantation processes or deposition processes in or on a single semiconducting piece of material, a so-called 'chip';
- b. Can be considered as indivisibly associated; and
- c. Perform the function(s) of a circuit.

N.B.: 'Circuit element' is a single active or passive functional part of an electronic circuit, such as one diode, one transistor, one resistor, one capacitor, etc.

"Neural computer" means a computational device designed or modified to mimic the behaviour of a neuron or a collection of neurons, i.e., a computational device which is distinguished by its hardware capability to modulate the weights and numbers of the interconnections of a multiplicity of computational components based on previous data.

"Numerical control" means the automatic control of a process performed by a device that makes use of numeric data usually introduced as the operation is in progress.

"Optical integrated circuit" means a "monolithic integrated circuit" or a hybrid integrated circuit, containing one or more parts designed to function as a photo sensor or photo emitter or to perform (an) optical or (an) electro-optical function(s).

"Precursors": Speciality chemicals used in the manufacture of explosives.

"Pressure transducers" are devices that convert pressure measurements into an electrical signal.

"Production" means all production stages (e.g., product engineering, manufacture, integration, assembly (mounting), inspection, testing, quality assurance);

"Production equipment": Tooling, templates, jigs, mandrels, moulds, dies, fixtures, alignment mechanisms, test equipment, other machinery and components therefor, limited to those specially designed or modified for "development" or for one or more phases of "production".

"Production facilities": Equipment and specially designed "software" therefor integrated into installations for "development" or for one or more phases of "production".

"**Programmes**": A sequence of instructions to carry out a process in, or convertible into, a form executable by an electronic computer.

"**Propellants**": Substances or mixtures that react chemically to produce large volumes of hot gases at controlled rates to perform mechanical work.

"Public domain" means a domain that has no restrictions upon dissemination of information within or from it; the existence of any legal rights to the intellectual property in that information does not remove the information from being in "public domain".

"Radiation hardened": Means that the component or equipment is designed or rated to withstand radiation levels which meet or exceed a total radiation dose of 5×10^3 Gy or 5×10^5 rads (Si).

"Required": As applied to "technology", refers to only that portion of "technology" which is peculiarly responsible for achieving or exceeding the controlled performance levels, characteristics or functions. Such

"required" "technology" may be shared by different products.

"Resolution" means the least increment of a measuring device; or on digital instruments, the least significant bit.

"Roving" is a bundle (typically 12-120) of approximately parallel 'strands'. N.B.: 'Strand' is a bundle of "monofilaments" (typically over 200) arranged approximately parallel.

"Settling time" means the time required for the output to come within one-half bit of the final value when switching between any two levels of the converter.

"Signal processing" means the processing of externally derived information-bearing signals by algorithms such as time compression, filtering, extraction, selection, correlation, convolution or transformations between domains (e.g., fast Fourier transform or Walsh transform).

"Software": A collection of one or more "programmes", or "micro-programmes", fixed in any tangible medium of expression. However, unless otherwise provided for against any item on the SCOMET List, the List does not control "software" which is either in the public domain or is generally available to the public by being :

- a. Sold from stock at retail selling points without restriction, by means of:
 - 1. Over-the-counter transactions;
 - 2. Mail order transactions; or
 - 3. Telephone call transactions; and
- b. Designed for installation by the user without further substantial support by the supplier.

"Space qualified": Products designed, manufactured and tested to meet the special electrical, mechanical or environmental requirements for use in the launch and deployment of satellites or high altitude flight systems operating at altitudes of 100 km or higher.

"Stability" means the standard deviation (1 sigma) of the variation of a particular parameter from its calibrated value measured under stable temperature conditions. This can be expressed as a function of time.

"Specially designed" qualifies the description of equipment, parts, components or "software" which, as a result of "development", have unique properties that distinguish them for certain predetermined purposes. For example, a piece of equipment that is "specially designed" will only be considered so if it has no other function or use. Thus a piece of manufacturing equipment that is "specially designed" to produce a certain type of component will only be considered such if it is not capable of producing other types of components.

"Tape" is a material constructed of interlaced or unidirectional "monofilaments", 'strands', "rovings", "tows", or "yarns", etc., usually preimpregnated with resin.

N.B.: 'Strand' is a bundle of "monofilaments" (typically over 200) arranged approximately parallel.

"Technology" means, except as otherwise provided for against any item in the SCOMET List, information (including information embodied in "software") other than information in the "public domain", that is capable of being used in:

- a. the development, production or use of any goods or software;
- b. the development of, or the carrying out of, an industrial or commercial activity or the provision of a service of any kind.

Explanation: When technology is described wholly or partly by reference to the uses to which it (or the goods to which it relates) may be put, it shall include services which are provided or used, or which are capable of being used, in the development, production or use of such technology or goods.

"Tow" is a bundle of "monofilaments", usually approximately parallel.

"Toxins" means toxins in the form of deliberately isolated preparations or mixtures, no matter how produced, other than toxins present as contaminants of other materials such as pathological specimens, crops, foodstuffs or seed stocks of "microorganisms".

"Unmanned Aerial Vehicle" ("UAV") means any aircraft capable of initiating flight and sustaining controlled flight and navigation without any human presence on board.

"Usable in," "usable for," "usable as" or "capable of" qualifies the description of equipment, parts, components, materials, technology or "software" which are suitable for a particular purpose. There is no requirement that the equipment, parts, components, technology or "software" should have been configured, modified or specified for that particular purpose. (Contrast with "specially designed" – see above).

"Use" includes operation; installation (including on site installation); maintenance; repair; overhaul; refurbishing.

"Vaccine" is a medicinal product in a pharmaceutical formulation licensed by, or having marketing or clinical trial authorisation from, the regulatory authorities of either the country of manufacture or of use, which is intended to stimulate a protective immunological response in humans or animals in order to prevent disease in those to whom or to which it is administered.

"Yarn" is a bundle of twisted 'strands'.

N.B.: 'Strand' is a bundle of "monofilaments" (typically over 200) arranged approximately parallel.

Items on the SCOMET List are organized in the following categories.

Category 0 0A 0A1	Nuclear materials, nuclear-related other materials, equipment and technology Prescribed Substances Source Material
0A2	Special Fissionable Material
0A3	Other Materials
0B	Prescribed Equipment
0C	Technology
Category 1	Toxic chemical agents and other chemicals
1A	Prohibited chemicals
1B	Chemicals permitted only to States party to the Chemical Weapons Convention
1C	Chemicals permitted also to States not party to the Chemical Weapons Convention
Category 2	Micro-organisms, toxins
2A 0	Bacteria
2B	Fungi
2C	Parasites
2D	Viruses
2E	Rickettsials
2F	Toxins
2G	Plant pathogens
2H	Genetically Modified Organisms
Category 3	Materials, Materials Processing Equipment and related technologies
3A	Materials
3A1	Special materials
3A2	Structural materials
3A3	Rocket propellants and constituent chemicals
3A4	High explosives
3A5	Stealth materials
3B	Materials processing and production equipment, related technology and specially
-	designed components and accessories therefor.
3C	[Reserved]
3D	Chemical and biomaterial manufacturing and handling equipment and facilities
Category 4	Nuclear-related other equipment and technology, not controlled under Category 0
4A	Equipment, assemblies, components including test and production equipment
4B	Equipment, assemblies, components including test and measurement equipment usable in development of nuclear explosive devices
4C	Technology
Category 5	Aerospace systems, equipment, including production and test equipment, related technology and specially designed components and accessories therefor.
5A	Rocket systems
5A1	Systems
5A2	Production and test equipment
5A3	Technology
5B	Unmanned aerial vehicles
5C	Avionics and navigation systems
5D	Manned-aircraft, aero-engines, related equipment and components
5E	Micro-light aircraft and powered 'hang-gliders'

Category 6	[Reserved]
Category 7	Electronics, computers, and information technology including information security
7A 7A	Electronics
7B	Electronic test equipment
7C	Computers
7D	Information technology including information security
7E	[Reserved]

Category 0 Nuclear materials, nuclear-related other materials, equipment and technology

Note: Export of these items is regulated under the Atomic Energy Act, 1962 and rules framed, and notifications/orders issued thereunder from time-to-time by the Department of Atomic Energy. The licensing authority for items in this category is the Department of Atomic Energy. An application for licences to export prescribed equipment or/an prescribed substances shall be made in writing to the Joint Secretary, Department of Atomic Energy, Anushakti Bhavan, CSM Marg, Mumbai 400 001.

0A Prescribed Substances

Note: Any radioactive material in Category 0A shall additionally attract the provisions of Radiation Protection Rules, 2004 made under the Atomic Energy Act, 1962 and the provisions of Section-16 of the Atomic Energy Act, 1962.

0A1 Source Material

- **0A101** Uranium containing the mixture of isotopes occurring in nature.
- **0A102** Uranium depleted in the isotope 235.
- 0A103 Thorium.
- **0A104** Any of the foregoing in the form of metal, alloy, chemical compound, or concentrate or any substance.
- **0A105** Any other material containing one or more of the foregoing.

Prescribed quantitative limits: as given below and in any period of 12 months:

- a. Uranium (containing the mixture of isotopes in nature) exceeding 100 kilograms.
- b. Depleted uranium (uranium depleted in the isotope 235 below that occurring in nature) exceeding 1000 kilograms.
- c. Thorium exceeding 1000 kilograms.

0A2	Special Fissionable Material	
0A201	Plutonium-239.	
0A202	Uranium-233.	
0A203	Uranium enriched in the isotopes 235 or 233.	
0A204	Neptunium.	
0A205	Any material containing one or more of the foregoing.	
0A206	Such other fissionable material determined by the Central Government from time to time,	
	but the term "special fissionable material" does not include source material.	

Note: Any quantity of special fissionable material is prescribed substance.

0A3 Other Materials

'Other Materials' means non-nuclear materials for reactors, nuclear related dual-use materials indicated below and such materials as determined by the Central Government from time to time.

0A301	Deuterium, heavy water (deuterium oxide) and any other deuterium compound, in which the ratio of deuterium to hydrogen atoms exceeds 1:5000, in quantities exceeding 5 kilograms of deuterium in one consignment or 25 kilograms of deuterium in any period of 12 months.
0A302	Nuclear grade graphite / carbon, having a purity level better than 5 parts per million (ppm) boron equivalent and with a density greater than 1.5 gram/cc in quantities exceeding 30 metric tons in any period of 12 months.
0A303	Zirconium with hafnium content of less than 1 part to 500 parts of zirconium by weight (i.e. less than 2000 ppm) in the form of metal, its alloys, compounds, manufactures thereof, waste or scrap of any of the foregoing.
0A304	 Beryllium, its compounds, alloys and its minerals / concentrates including Beryl but excluding: a. beryllium windows used for x-ray machines and gamma ray detectors and b. beryl in the form of emeralds or aquamarines.
0A305	Lithium enriched in the Lithium-6 (6Li) isotope to greater than its natural isotopic abundance (i.e. more than 7.5%) and the products or devices containing enriched lithium such as elemental lithium, alloys, compounds, mixtures containing lithium, manufactures thereof, waste or scrap of any of the foregoing.
0A306	Niobium and Tantalum, their metals, alloys and minerals including columbite and tantalite.
0A307	Titanium alloys having both of the following characteristics:

- a. 'Capable of' an ultimate tensile strength of 900 MPa or more at 293 K (20 degrees C); and
- b. In the form of tubes or cylindrical solid forms (including forgings) with an outside diameter of more than 75 mm.

Technical note: The phrase 'capable of' encompasses titanium alloys before or after heat treatment.

- **0A308** Tritium, tritium compounds or mixtures containing tritium in which the ratio of tritium to hydrogen atoms exceeds 1 part in 1000, except when utilized in such quantities and for such purposes as for organic labelled compounds, Gas Filled Light Sources and as Tritiated Water for radiotracer studies.
- **0A309** Hafnium: (CAS 7440-58-6)

Hafnium metal, alloys containing more than 60% hafnium by weight, hafnium compounds containing more than 60% hafnium by weight, manufactures thereof, and waste or scrap of any of the foregoing.

0A310 Radium-226:

Radium-226 (226Ra), radium-226 alloys, radium-226 compounds, mixtures containing radium-226, manufactures thereof, and products or devices containing any of the foregoing, except medical applicators and a product or device containing less than 0.37 GBq (10mCi) of Ra-226 in any form.

 OA311 Boron (CAS 7740-42-8)
 Boron enriched in the Boron-10 (10B) isotope to greater than its natural isotopic abundance as follows: Elemental boron, compounds, mixtures containing boron, manufactures thereof, waste or scrap of any of the foregoing.
 OA312 Helium-3

Helium-3 (3He), mixtures containing helium-3, and products or devices containing any of the foregoing.

Note: A product or device containing less than 1gm of Helium-3 is excluded.

0A313 Alpha–emitting radionuclides:

Alpha–emitting radionuclides having an alpha half-life of 10 days or greater but less than 200 years, in the following forms:

- a. Elemental;
- b. Compounds having a total alpha activity of 37 GBq per kg or greater;
- c. Mixtures having a total alpha activity of 37 GBq per kg or greater;
- d. Products or devices containing any of the foregoing.

Alpha emitters controlled by this item include:

Actinium-225	Actinium-227	Americium-242m
Californium-248	Californium-250	Californium-252
Californium-253	Californium-254	Curium-240
Curium-241	Curium-242	Curium-243
Curium244	Einsteinium-252	Einsteinium-253
Einsteinium254	Einsteinium-255	Fermium-257
Gadolinium-148	Mendelevium-258	Neptunium-235
Plutonium-236	Plutonium-237	Plutonium-238
Plutonium-241	Polonium-209	Polonium-210
Polonium-208	Radium-223	Thorium-228
Thorium-227	Uranium-230	Uranium-232

0B Prescribed Equipment

0B001

Nuclear Reactors; associated equipment, components, and systems specially designed, prepared, or adapted or used or intended to be used in such reactors:-

- a. Complete nuclear reactors
- b. Nuclear reactor vessels
- c. Nuclear reactor fuel charging and discharging machines
- d. Nuclear reactor control rods and equipment
- e. Nuclear reactor pressure tubes
- f. Zirconium tubes and assemblies of tubes in which hafnium to zirconium ratio is 1:500 or less
- g. Primary coolant pumps
- h. Nuclear reactor internals
- i. Heat exchangers (steam generators) for use in the primary coolant circuit of a nuclear reactor
- j. Neutron detection and measuring instruments for determining neutron flux levels within the core of a nuclear reactor.

- **0B002** Plants for processing, production, concentration, conversion or recovery of Prescribed Substances (such as uranium, plutonium, thorium, deuterium, heavy water, tritium, lithium); associated equipment, components and systems specially designed, prepared or adapted or used or intended to be used in such plants including but not limited to:
 - a. Plants for production or concentration of deuterium, heavy water-
 - 1. Water Hydrogen Sulphide Exchange Towers
 - 2. Blowers and Compressors for hydrogen-sulphide gas circulation
 - 3. Ammonia-Hydrogen Exchange Towers greater than or equal to 35 m in height with diameters of 1.5 m to 2.5 m
 - 4. Tower Internals and Stage Pumps
 - 5. Ammonia Crackers with operating pressures greater than or equal to 3 MPa
 - 6. Infrared Absorption Analyzers capable of 'on-line' hydrogen/ deuterium ratio analysis
 - 7. Catalytic Burners for conversion of enriched deuterium gas into heavy water
 - 8. Complete heavy water upgrade systems or columns therefor
 - b. Plants for the conversion of uranium
 - c. Plants for the conversion of plutonium
 - d. Tritium facilities or plants, and equipment therefor
 - e. Lithium isotope separation facilities or plants, and equipment therefor
- **0B003** Plants for reprocessing of irradiated nuclear fuel and equipment, components and systems specially designed, prepared or adapted or used or intended to be used in such plants, including but not limited to:
 - a. Irradiated fuel element chopping machines designed for remote operation
 - b. Dissolvers capable of withstanding hot and highly corrosive liquid for dissolution of irradiated nuclear fuel and which can be remotely loaded and maintained
 - c. Solvent extractors and solvent extraction equipment resistant to the corrosive effect of nitric acid
 - d. Chemical holding or storage vessels resistant to the corrosive effect of nitric acid
 - e. Industrial equipment including assemblies and components as follows:
 - 1. High density (lead glass or other) radiation shielding windows
 - 2. Radiation hardened TV cameras, or lenses therefor
 - 3. 'Robots' or 'end effectors' specially designed for handling high explosives; and control units therefor
 - 4. Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells
- **0B004** Plants for treatment, handling, storage and transportation of radioactive wastes from nuclear reactors or from plants for processing Source Materials or Special Fissionable Materials or from nuclear reprocessing plants; irradiated nuclear fuel; Special Fissionable Materials, and equipment specially designed, prepared, adapted, or intended to be used therefor.
- **0B005** All systems, associated equipment, components for separation or enrichment of isotopes of uranium, plutonium, lithium or boron, other than analytical instruments, specially designed, prepared, adapted, used or intended to be used therefor as follows:
 - a. Gas centrifuges and assemblies and components specially designed or prepared for use in gas Centrifuges
 - b. Specially designed or prepared auxiliary systems, equipment and components for gas centrifuge enrichment plants
 - c. Specially designed or prepared assemblies and components for use in gaseous

diffusion enrichment

- d. Specially designed or prepared auxiliary systems, equipment and components for use in gaseous diffusion enrichment
- e. Specially designed or prepared systems, equipment and components for use in aerodynamic enrichment plants
- f. Specially designed or prepared systems, equipment and components for use in chemical exchange or ion exchange enrichment plants.
- g. Specially designed or prepared systems, equipment and components for use in laser-based enrichment plants.
- h. Specially designed or prepared systems, equipment and components for use in plasma separation enrichment plants.
- i. Specially designed or prepared systems, equipment and components for use in electromagnetic enrichment plants.

0B006 Plants for the fabrication of nuclear reactor fuel elements, and equipment specially designed or prepared therefor including but not limited to:

- a. fully automatic pellet inspection stations specially designed or prepared for checking final dimensions and surface defects of the fuel pellets;
- b. automatic welding machines specially designed or prepared for welding end caps onto the fuel pins (or rods);
- c. automatic test and inspection stations specially designed or prepared for checking the integrity of completed fuel pins (or rods).

Item 'c' typically includes equipment for: 1) x-ray examination of pin (or rod) end cap welds, 2) helium leak detection from pressurized pins (or rods), and 3) gamma-ray scanning of the pins (or rods) to check for correct loading of the fuel pellets inside.

- **0B007** Plants or systems for production, handling, storage and transportation of Radioisotopes in quantities exceeding 100 Curies (3.7 X 10 12 Becquerel).
- **0B008** Neutron generators including neutron chain reacting assemblies and fusion assemblies of all kinds for producing fissile materials

0C Technology

Technology and software for the development, production or use of prescribed substances or prescribed equipment specified in 0A or 0B.

Category 1 Toxic chemical agents and other chemicals

1A

Export of the following chemicals is prohibited:

(*This corresponds to Schedule 1 to the Chemical Weapons Convention (CWC)*) *Note:* Where reference is made below to groups of di-alkylated chemicals, followed by a list of alkyl groups in parentheses, all chemicals possible by all possible combinations and alkyl groups listed in parentheses are considered prohibited unless explicitly exempted.

- (1). O-Alky (≤C10 , incl. cycloalkyl) alkyl (Me, Et,n-Pr or i-Pr) phosphonofluoridates
 e.g. Sarin: O-Isopropyl methylphosphonofluoridate
 - Soman: O-Pinacolyl methylphosphonofluoridate
- (2). O-Alkyl, (\leq C10, incl. cycloalkyl) N,N-dialkyl (Me, Et, n-Pr or i-Pr) phosphoramidocyanidates

e.g. Tabun: O-Ethyl N,N,-dimethyl phosphoramidocyanidate

(3). O-Alkyl (H or ≤ C10, incl. cycloalkyl) S-2-Dialkyl (Me, Et, n-Pr or i-Pr)aminoethyl alkyl (Me, Et, n-Pr or i-Pr) phosphonothiolates and corresponding alkylated or protonated salts e.g. VX: O-Ethyl S-2 diisopropylaminoethyl methyl phosphonothiolate

(4). Sulphur mustards: 2-Chloroethylchloromethylsulphide Mustard gas: Bis (2-chloroethyl) sulphide Bis (2-chloroethylthio) methane Sesquimustard:1,2-Bis (2-chloroethylthio) ethane 1,3-Bis (2-chloroethylthio)-n-propane 1,4-Bis (2-chloroethylthio)-n-butane 1,5-Bis (2-chloroethylthio)-n-Pentane Bis (2-Chloroethylthiomethyl) ether O-Mustard: Bis (2-Chloroethylthiomethyl) ether (5). Lewisites: Lewisite 1: 2-Chlorovinyldichloroarsine Lewisite 2: Bis (2-Chlorovinyl) chloroarsine Lewisite 3: Tris (2-Chlorovinyl) arsine

- (6). Nitrogen mustards: HN1: Bis (2-chloroethyl) ethylamine HN2: Bis (2-chloroethyl) Chloroarsine HN3: Tris (2-chloroethyl) amine
- (7). Saxitoxin
- (8). Ricin
- (9). Alkyl (Me, Et, n-Pr or I-Pr) phosphonyldifluorides e.g. DF: Methyl phosphonyldifluoride
- (10). O-Alkyl (H or ≤ C10, incl. cycloalkyl) O-2 dialkyl (Me, Et, n-Pr or i-Pr)aminoethylalkyl (Me, Et N-Pr or i-Pr) phosphonites and corresponding alkylated or protonated salts e.g.QL: O-Ethyl O-2-diisopropylaminoethyl methyl phosphonite
- (11). Chlorosarin: O-Isopropyl methylphosphonochloridate
- (12). Chlorosoman: O-Pinacolyl methylphosphonochloridate
- Export of chemicals listed in 1B below is permitted only to States party to the Chemical Weapons Convention

(This corresponds to Schedule 2 to the Chemicals Weapons Convention)

Note to exporter:

1B

- (a) A list of States Parties can be obtained from the Disarmament & International Security Affairs Division of the Ministry of External Affairs (Room No. 40G, South Block, New Delhi) or at the official website of the Organization for the Prohibition of Chemical Weapons at www.opcw.org.
- (b) A general permission valid for a period of two years may be applied for export of chemicals in this category. This permission shall be subject to the condition that for each export consignment, exporters shall, within 30 days of exports, notify the details to the National Authority, Chemical Weapons Convention, Cabinet Secretariat ; Ministry of External Affairs (D&ISA); Department of Chemicals and Petrochemicals and the Directorate General of Foreign Trade and submit to DGFT,

a copy of Bill of Entry into the destination State Party within 30 days of delivery.

- Note: Where reference is made below to groups of dialkylated chemicals, followed by a list of alkyl groups in parentheses, all chemicals possible by all possible combinations and alkyl groups listed in parentheses are included unless explicitly exempted.
- 1. Amiton 0,0-Diethyl S-[2-(diethylamino) ethyl)] phosphorothiolate and corresponding alkylated or protonated salts
- 2. PFIB: 1,1,3,3,3,-Pentafluoro-2-(trifluoromethyl)1-propene
- 3. BZ: 3-Quinuclidinyl benzilate
- 4. Chemicals, except for those listed in Schedule 1, containing a phosphorus atom to which is bonded one methyl, ethyl or propyl (normal or iso) group but not further carbon atoms,
 - e.g.Methylphosphonyl dichloride

Dimethyl methylphosphonate

Exemption:- Fonofos: O-Ethyl S-phenyl ethylphosphonothiolothionate

- 5. N, N-Dialkyl (ME, Et, n-Pr or i-Pr) phosphoramidic dihalides
- 6. Dialkyl (Me, Et, n-Pr or i-Pr) N, N-dialkyl (Me, Et, n-Pr or i-Pr)-phosphoramidates 7. Arsenic trichloride
- 8. 2,2-Diphenyl-2 hydroxyacetic acid
- 9. Quinuclidine-3-ol
- 10. N,H-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethyl-2 -chlorides and corresponding protonated salts
- 11. N, N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-ols and corresponding protonated salts

Exemptions: N,N-Dimethylaminoethanol and corresponding protonated salts N,N-Diethylaminoethanol and corresponding protonated salts

- 12. N, N-Dialkyl (Me, Et, n-Pr or i-Pr) aminoethane-2-thiols and corresponding protonated salts
- 13. Thiodiglycol: Bis(2-hydroxyethyl) sulphide
- 14. Pinacolyl alcohol: 3,3-Dimethylbutane-2-ol

A List of commercially important Schedule-2 Chemicals of CWC is given below :

SI. No.	Name of Chemical	Entry into Schedule	CAS (Chemical Abstract Service) Numbers	ITC(HS) codes
1.	2-Chloro N, N-Di-isopropyl ethylamine	2B10	4261-68-1	29211911
2.	Diethyl amino Ethanethiol	2B12	100-38-9	29221910
3.	O, O, Dimethyl Methyl Phosphonate	2B04	756-79-6	29209045
4.	2-Hydroxy N, N-Diisopropyl Ethylamine	2B11	96-80-0	29221111
5.	N, N-Diethyl Amino ethyl Chloride Hydrochloride	2B10	869-24-9	29221112
6.	Di-ethyl Amino ethanethiol Hydrochloride	2B12	1942-52-5	29221113
7.	Di-Methyl Amino ethyl chloride Hydrochloride	2B10	4584-46-7	29221114
8.	Di-Methyl Amino ethanethiol	2B12	108-02-1	29221115
9.	Di-Methyl Amino ethanethiol Hydrochloride	2B12	13242-44-9	29221116
10.	Phosphorothioic acid, S [2-(diethylamino) ethyl] O, O – diethyl ester	2A01	78-53-5	29201910
11.	1-Propene, 1,1, 3, 3, 3, - Pentafluoro – 2-	2A02	382-21-8	29033911

	(trifluoromethyl) (PFIB)			
12.	Benzeneacetic acid, alphahydroxy – alpha-	2A03	6581-06-2	29392050
	phenyl, 1 – azabicyclo [2.2.2.] oct-3-yl ester			
13.	Phosphonic Acid, Methyl-compound with	2B04	84402-58-4	29209047
	(aminoimino methyl) urea (1: 1)			
14.	1-Propanaminium N, N, N-trimethyl – 3- [1-	2B04	70055-71-9	29209048
	oxo-9 octadecenyl) amino] (Z)- methyl			
	methylphosphonate			
15.	Phosphonic acid, [methyl bis (5-ethyl-2-	2B04	42595-45-9	29209051
	methyl-2-oxido-1, 3, 2- dioxaphosphorinan-			
	5-yl) methyl] ester			
16.	Phosphonic acid, [methyl-(5-ethyl-2-methyl	2B04	41203-81-0	29209052
	2-oxido-1,3,2-dioxaphosphorinan-5-yl)			
17	methyl] ester	2004	10755 12 6	20200052
17. 18.	Phosphonic acid, propyl-dimethyl ester Phosphonous acid, methyl-diethyl ester	2B04 2B04	18755-43-6 15715-41-0	29209053 29209054
18. 19.	Phosphonic acid, ethyl-	2B04 2B04	6779-09-5	29209034
20.	Phosphonic acid, propyl-	2B04 2B04	4672-38-2	29209055
20. 21.	Phosphinic acid, methyl-	2B04 2B04	4206-94-4	29209050
21.	Phosphonochloridic acid, methyl-, methyl	2B04 2B04	1066-52-0	29209057
<i>22</i> .	ester	2004	1000 52 0	27207050
23.	Phosphonothioic dichloride, ethyl-	2B04	993-43-1	29209061
24.	Phosphonic acid methyl-	2B04	993-13-5	29209062
25.	Phosphonic acid, methyl-, dimethyl ester	2B04	756-79-6	29209063
26.	Phosphonic dichloride, methyl-	2B04	676-97-1	29209064
27.	Phosphonous dichloride, methyl-	2B04	676-83-5	29209065
28.	Phosphonic acid, ethyl-, diethyl ester	2B04	78-38-6	29209066
29.	Arsenous trichloride	2B07	7784-34-1	28121060
30.	Benzeneacetic acid, alpha-hydroxy-alpha-	2B08	76-93-7	29181910
	phenyl			
31.	1-Azabicyclo (2.2.2.) octan-3-ol	2B09	1619-34-7	29333930
32.	Ethanamine, 2-Chloro-N, N-dimethyl-	2B10	107-99-3	29211914
33.	Ethanol, 2-[bis(1-methylethyl) amino]-	2B11	96-80-0	29221920
34.	Ethanethiol, 2-(diethylamino)-	2B12	100-38-9	29221930
35.	Ethanol, 2, 2'-thiobis-	2B13	111-48-8	29309091
36.	2-Butanol, 3, 3-dimethyl-	2B14	464-07-3	29051910

1C Export of Chemicals as specified below is allowed to State Parties to the CWC without an export licence subject to the condition that the exporter shall notify within 30 days of export to the National Authority, Chemicals Weapons Convention, Cabinet Secretariat; the Ministry of External Affairs (D&ISA); the Department of Chemicals & Petro-chemicals, and the DGFT of such exports in the prescribed format (Aayat Niryat Form) along with the End-Use Certificate and submit to the DGFT a copy of the bill of entry into the destination State Party within 30 days of delivery. Export of chemicals as specified below to states not party to the Chemical Weapons Convention shall continue to be restricted and will be allowed only against an export licence, and in that case also exporters shall submit to the DGFT a copy of the bill of entry into the destination country within 30 days of export.

Sl.No.		Entry into	CAS	ITC (HS)
	Name of Chemical	Schedule	Numbers	codes
1.	Phosgene : (Carbonyl dichloride)	3A01	75-44-5	28121010
2.	Cyanogen chloride [(CN) C1]	3A02	506-77-4	28530091
3.	Hydrocyanic acid	3A03	74-90-8	28111910
4.	Chloropicrin: Trichloronitro-Methane	3A04	76-06-2	29049080
5.	Phosphorus Oxychloride	3B05	10025-87-3	28121030

6.	Phosphorus trichloride	3B06	7719-12-2	28121021
7.	Phosphorous Pentachloride	3B07	10026-13-8	28121022
8.	Trimethyl Phosphite	3B08	121-45-9	29209041
9.	Triethyl Phosphite	3B09	122-52-1	29209042
10.	Dimethyl Phosphite	3B10	868-85-9	29209043
11.	Diethyl Phosphite	3B11	762-04-9	29209044
12.	Sulphur monochloride	3B12	10025-67-9	28121042
13.	Sulphur dichloride	3B13	10545-99-0	28121043
14.	Thionyl Chloride	3B14	7719-09-7	28121047
15.	Ethyldiethanolamine	3B15	139-87-7	29221211
16.	Methyldiethanolamine	3B16	105-59-9	29221212
17.	Triethanolamine	3B17	102-71-6	29221300

Category 2 Micro-organisms, toxins

Bacillus anthracis

2A001

Bacteria, whether natural, enhanced or modified, either in the form of isolated live 2A cultures or as material including living material which has been deliberately inoculated or contaminated with such cultures for the following:

2A001	Daemus anunaeis
2A002	Bordetella bronchoseptica
2A003	Brucella abortus,
2A004	Brucella melitensis
2A005	Brucella suis
2A006	Chlamydia psittaci
2A007	Clostridium botulinum
2A008	Clostridium perfringes
2A009	Corynebacterium diphtheriae
2A010	Francisella tularensis
2A011	Klebsiella pneumoniae
2A012	Legionlla pneumophila
2A013	Leptospira interrogans - all serotypes reported in India
2A014	Mycobacterium bovis
2A015	Mycobacterium tuberculosis
2A016	Mycoplasma mycoides - var mycoides
2A017	Mycoplasma mycoides - var Capri
2A018	Neisseria meningitidis
2A019	Paseturella multicoda type B
2A020	Pseudomonas mallei
2A021	Pseudomonas pseudomallei
2A022	Salmonella paratyphi
2A023	Shigella dysenteriae
2A024	Staphylococcus aureus
2A025	Streptococcus pneumoniae
2A026	Vibrio cholerae elter
2A027	Vibrio Cholerae 0139
2A028	Yersinia pestis
2B	Fungi, whether natural, enhanced or modified, either in the form of isolated live
	cultures or as material including living material which has been deliberately
	inoculated or contaminated with such cultures for the following:
2B001	Blastomyces dermatitidis
2B002	Coccidiodes immitis
2B002 2B003	Histoplasma capulatum

- 2B004 Nocardia asteroides2B005 Paracoccidioides braziliensis
- 2C Parasites, whether natural, enhanced or modified, either in the form of isolated live cultures or as material including living material which has been deliberately inoculated or contaminated with such cultures for the following:

2C001	Entamoeba histolytica
2C002	Babesia microti
2C003	Babesia divergens
2C004	Blostidium coli
2C005	Cryptosporidium spp.
2C006	Leishmania species
2C007	Naegleria australiensis
2C008	Naegleria fowleri
2C009	Plasmodium falciparum
2C010	Pneumocystis carinii
2C011	Schistosoma mansoni
2C012	Schistosoma japonicum
2C013	Schistosoma hemotobium
2C014	Toxoplasma gondii
2C015	Trichinella spiralis

- 2C016 Trypanosoma bruiei
- 2D Viruses, whether natural, enhanced or modified, either in the form of isolated live cultures or as material including living material which has been deliberately inoculated or contaminated with such cultures for the following:
- 2D001 African Horse Sickness virus 2D002 African Swine Fever virus 2D003 Avian influenza virus 2D004 Blue tongue virus 2D005 Camel pox virus 2D006 Chikungunya virus 2D007 Crimean-Congo hemorrhagic fever virus 2D008 Dengue virus 2D009 Eastern equine encephalitis virus Ebola fever virus 2D010 Encephalomyocarditis virus (EMC) 2D011 Foot and Mouth Disease virus (all serotypes and subtypes) 2D012 2D013 Guanirito virus 2D014 Goatpox virus 2D015 Hantaan virus 2D016 Herpes virus simiae (monkey B virus) 2D017 Herpes ateles, Herpes saimiri 2D018 HIV-1 & HIV-2 and other strains of SIV Hog cholera virus 2D019 2D020 Human T-cell Leukemia virus 2D021 Junin virus Japanese encephalitis virus 2D022 2D023 Kyasanur Forest Disease virus and Central European encephalitis viruses. 2D024 Korean hemorrhagic fever virus 2D025 Lymphocytic choriomeningitis virus (LCM) 2D026 Lassa virus 2D027 Marburg virus

2D028	Murrey valley encephalitis virus
2D029	Marchupo virus
2D030	Mason-pfizer monkey virus
2D031	Monkey pox virus
2D032	Newcastle disease virus
2D033	Omsk hemorrhagic fever virus
2D034	Peste des petits ruminant virus
2D035	Porcine enterovirus type I
2D036	Powassan virus
2D037	Rabies virus -all strains
2D038	Respiratory syncitial virus
2D039	Rift Valley Fever virus
2D040	Rinderpest virus
2D041	Sabia virus
2D042	Sheep pox (field strain)
2D043	Sin Nombre virus
2D044	Smallpox virus
2D045	St.Louis encephalitis virus
2D046	Swine Fever virus
2D047	Tick-borne encephalitis virus (Russian Spring Summer Encephalitis virus)
2D048	Teschen disease virus (Porcine entero virus type 1)
2D049	Variola virus
2D050	Venezuelan encephalitis virus
2D051	Vesicular stomatitis virus
2D052	Western encephalitis virus
20052	Vallow favor virus 17 D vascing strain

- 2D053 Yellow fever virus, 17 D vaccine strain
- 2E Rickettsials, whether natural, enhanced or modified, either in the form of isolated live cultures or as material including living material which has been deliberately inoculated or contaminated with such cultures for the following:

2E001 Coxiella burnetti

- 2E002 Rickettsiae rickettsii
- 2E003 Rickettsia quintana
- 2E004 Rickettsia prowazebi

2F Toxins

2F001	Abrins
2F002	Aflatoxins
2F003	Anatoxins
2F004	Botulinum toxin (s) (clostradium botulinum)
2F005	Bungarotoxins
2F006	Clostridium perfringens toxins
2F007	Corynebacterium diphtheriae toxins
2F008	Cyanginosins (Microcystins) (Microcystic aeuginosa)
2F009	Enterotoxin (Staphylococcus aureus)
2F010	Neurotoxin (Shigella dysenteriae)
2F011	Ricins
2F012	Shigatoxins
2F013	Saxitoxins
2F014	Trichothecene mycotoxins
2F015	Tetanus toxin (clostridium tetani)
2F016	Tetrodotoxin (Spheroides rufripes)
2F017	Verrucologen (M. verrucadia)

2G Plant pathogens

2G001	Bemisia tabaci
2G002	Colletotrichum coffeanum var. virulans
2G003	Clavicep purpurea
2G004	Dothistroma pini (Scirrhia pini)
2G005	Erwinia amylovora
2G006	Frankliniella occidentalis
2G007	Microcyclus ulei
2G008	Peronospora hyoscyami de Bary f.sp. tabacina (Adam) skalicky
2G009	Phytophthora infestans
2G010	Puccinia graminis
2G011	Puccinia erianthi
2G012	Puccinia striiformiis (Puccinia glumarum)
2G013	Pyricularia oryzae
2G014	Pseudomonas solanacearum
2G015	Peronospora hyscyami de Bary
2G016	Ralstonia solanacearum
2G017	Sugar cane Fiji disease virus
2G018	Sclerotinia sclerotiorum
2G019	Tilletia indica
2G020	Thrips palmi
2G021	Ustilago Maydis
2G022	Xanthomonas albilineans
2G023	Xanthomonas campestris pv citri
20024	37 1

2G024 Xanthomonas campestris pv oryzae

2H Genetically Modified Organisms

2H001 Genetically-modified micro-organisms or genetic elements that contain nucleic acid sequences associated with pathogenicity and are derived from organisms specified above in 2A, 2B, 2C, 2D, 2E and 2H.

Genetically-modified micro-organisms or genetic elements that contain nucleic acid sequences coding for any of the toxins specified above in 2F.

Category 3 Materials, Materials Processing Equipment and related technologies

- 3A Materials
- 3A1 Special Materials
- 3A101 Zirconium, beryllium, magnesium, and alloys of these in particle size less than 60 µm
- **3A102** Maraging steel in any form in which any linear dimension exceeds 75 mm, or in the form of sheet, plate or tubing with a wall or plate thickness equal or less than 5 mm.
- **3A103** Tungsten (CAS 12070-12-1), molybdenum(CAS 1317-33-5), and alloys of those metals in the form of uniform spherical or atomized particles of size less than 500 μm
- 3A104 Germanium
- 3A105 Gallium

3A106	Indium
3A107	Titanium alloys including Titanium-stabilised Duplex Stainless Steel (Ti-DSS) (other than as specified at 0A307)
3A108	Aluminium alloys in any form 'capable of acquiring' an ultimate tensile strength of 460 MPa or more at 293 K (20 degrees C)
	Note: The phrase 'capable of acquiring' encompasses alloys before or after heat treatment
3A109	Bismuth having a purity of 99.99% or greater by weight and containing less than 10 parts per million by weight of silver
3A110	Calcium containing less than 1000 parts per million by weight of metallic impurities other than magnesium and containing less than 10 parts per million by weight of Boron
3A111	Chlorine trifluoride (ClF3)
3A112	Magnesium containing less than 200 parts per million by weight of metallic impurities other than calcium and containing less than 10 parts per million by weight of boron
3A113	Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight in forms with a hollow cylindrical symmetry (including cylinder segments) with an inside diameter between 100 and 300 mm and a mass greater than 20 kg.
3A114	a. Nickel powder of purity 99.0% or greater by weight and having a mean particle size of less than 10 μm;b. Porous nickel metal produced from the nickel powder specified above
3A115	Natural boron, boron carbide or metal borides having a boron purity of 85% or more.
3A116	Fibrous or filamentary materials, and prepregs, as follows:
	a. Carbon or aramid fibrous or filamentary materials having 'specific modulus' of
	 b. Glass fibrous or filamentary materials having 'specific modulus' of 3.18 x 106 m
	 or greater; and 'specific tensile strength' of 7.62 x 104 m or greater; c. Thermoset resin impregnated continuous yarns, rovings, tows or tapes with a width of 15 mm or less (prepregs), made from carbon or glass fibrous or filamentary materials specified in (a) or (b) above.
3A117	Carbon - carbon composites.
3A2	Structural Materials
3A201	Structural materials such as:
	a. Composite structures, laminates, resin impregnated fibre prepregs and metal coated fibre preforms made either with an organic matrix or metal matrix

- coated fibre preforms made either with an organic matrix or metal matrix utilizing fibrous or filamentary reinforcements, and manufactures thereof, specially designed for use in rocket systems (including ballistic missile systems, space launch vehicles and sounding rockets), unmanned aerial vehicles and cruise missiles and subsystems thereof;
- b. Resaturated pyrolized (i.e. Carbon-Carbon) materials specially designed for rocket systems (including ballistic missile systems, space launch vehicles and

sounding rockets), unmanned aerial vehicles and cruise missiles;

- c. Fine grain re-crystalised bulk graphites and pyrolytic or fibrous reinforced graphites usable for rocket nozzles and re-entry vehicles nose tips;
- d. Ceramic composite materials (dielectric constant less than 6 at any frequency from 100 MHz to 100 GHz) for use in missile radomes;
- e. Materials and coatings for reduced radar reflectivity;
- f. Bulk machinable silicon-carbide reinforced unfired ceramic usable in re-entry vehicles nose tips.

3A3 Rocket propellants and constituent chemicals:

- **3A301** Propulsive substances Hydrazine (CAS-302-01)and its derivatives usable as rocket fuel substances including Monomethylhydrazine (MMH)(CAS 60-34), Unsymmetrical dimethyl hydrazine (UDMH), (CAS 57-14-7)Hydrazine nitrate, (except aromatic hydrazines and their salts, adipic acid dihydrazide), ammonium perchlorate, spherical aluminium powder(CAS 7429-90-5);
- **3A302** Metal fuels containing any of the following: Zirconium(CAS 7440-67-7), beryllium(CAS 7440-41-7), magnesium, titanium, tungsten, boron and boron alloys, zinc, and alloys of magnesium(CAS 7439-95-4);
- **3A303** Polymeric substances:

Carboxyl-terminated polybutadiene (CTPB) Hydroxy-Terminated Polybutadiene (HTPB) Glycidyl azide polymer (GAP) Polybutadiene acrylic acid (PBAA) Polybutadiene acrylonitrile (PBAN)

- **3A304** Composite propellants and composite modified double base propellants;
- **3A305** High energy density materials such as boron slurry;
- 3A306 Oxidizers/fuels Perchlorates, chlorates or chromates mixed with powdered metals or other high energy fuel components; Dinitrogen trioxide, Nitrogen dioxide / Dinitrogen tetroxide, Mixed Oxides of Nitrogen (MON), Dinitrogen pentoxide, Inhibited red fuming nitric acid (IRFNA) (CAS 8007-58-7), Ammonium perchlorate (CAS 7790-98-9), Ammonium Dinitramide (ADN) (CAS 140456-78-6), Hydrazinium Nitroformate (HNF), Compounds composed of fluorine and one more of other halogens, oxygen or nitrogen.
- **3A307** Bonding agents Tris (1-2 (2-methyl)) aziridinyl phosphine oxide (MAPO)(CAS 57-39-6), Trimesoyl-1-(2-ethyl) aziridene (HX-868, BITA)(CAS 7722-73-8), Tepanol (HX-878)(CAS 68412-46-4), Tepan (HX-879) reaction product of tetraethlylenepentamine and acrylonitrile (CAS 68412-45-3), and Polyfunctional aziridine amides with isophthalic, trimesic, isocyanuric, or trimethyladipic backbone also having a 2-methyl or 2-ethyl aziridine group including 1,1'-Isophthaloyl-bis(2-methylaziridene (CAS 7652-64-4), (HX-752, HX-874, and HX-877);
- **3A308** Curing agents and reaction catalysts Triphyenyl bismuth (TPB)(CAS 603-33-8);
- **3A309** Burning rate modifiers
 - a. Carboranes, decaboranes, pentaboranes and derivatives thereof;
 - b. Ferrocene derivatives, as follows:
 - 1. Catocene (CAS 37206-42-1);
 - 2. Ethyl ferrocene;

- 3. Propyl ferrocene(CAS 1273-89-8)
- 4. n-Butyl ferrocene(CAS 31904-29-7);
- 5. Pentyl ferrocene (CAS 1274-00-6);
- 6. Dicyclopentyl ferrocene(CAS 20773-28-8);
- 7. Dicyclohexyl ferrocene;
- 8. Diethyl ferrocene;
- 9. Dipropyl ferrocene;
- 10. Dibutyl ferrocene(CAS 1274-08-4);
- 11. Dihexyl ferrocene (CAS 93894-59-8);
- 12. Acetyl ferrocenes;
- 13. Ferrocene Carboxylic acids;
- 14. Butacene;
- c. Other ferrocene derivatives usable as rocket propellant burning rate modifiers.
- **3A310** Nitrate esters and nitrated plasticisers as follows:
 - a. Triethylene glycol dinitrate (TEGDN);
 - b. Trimethylolethane trinitrate (TMETN)(CAS 3032-55-1);
 - c. 1,2,4-butanetriol trinitrate (BTTN)(CAS 6659-60-5);
 - d. Diethylene glycol dinitrate (DEGDN).
- **3A311** Stabilisers as follows:
 - a. 2-Nitrodiphenylamine (CAS 119-75-5);
 - b. N-methyl-p-nitroaniline (CAS 100-15-2).

3A4 High explosives

3A401 High explosives, and propellants or mixtures containing any of the following;

- a. Cycloteramethylenetetranitramine (HMX);
- b. Cyclotrimethylenetrinitramine (RDX);
- c. Triaminotrinitrobenzene (TATB);
- d. Hexanitrostilbene (HNS).

License applications for the export of items at 3A401a and 3A401b will normally be denied.

- **3A5** Stealth materials
- **3A501** a. Materials for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures;

b. Devices, including made from non-stealth material, for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures;

- **3A502** Materials and coatings (including paints) specially designed for reduced or tailored reflectivity or emissivity in the microwave, infrared or ultraviolet spectra other than coatings (including paints) when specially used for thermal control of satellites.
- **3A503** Technology related to the development, production or use of items in 3A.

3B Materials processing and "production equipment", related "technology" and specially designed components and accessories therefor.

3B001 Remote manipulators that provide mechanical translation of human operator actions by electrical, hydraulic or mechanical means and operating arm and terminal fixture that can be used to provide remote actions;

3B002	Multidirectional, multidimensional weaving and interlacing machines, including adapters and modification kits for weaving, interlacing or braiding fibres to fabricate composite structures except textile machinery which has not been modified for rocket systems;
3B003	Equipment designed or modified for production of fibrous or filamentary materials as follows: converting polymeric substances; vapour deposition on heated filament substrates; wet spinning of refractory ceramics.
3B004	Equipment designed or modified for special fibre surface treatment or for producing prepregs and preforms, including rollers, tension stretchers, coating equipment, cutting equipment and clicker dies;
3B005	Chemical vapour deposition furnaces designed or modified for the densification of carbon-carbon composites.
3B006	 Pyrolytic deposition and densification equipment including: a. Technology for producing pyrolytically derived materials formed on a mould, mandrel or other substrate from precursor gases. b. Specially designed nozzles for the above process. c. Equipment and process controls and specially designated software thereof, specially designed or modified for densification and pyrolysis of structural composite rocket nozzles and re-entry vehicle nose tips.
3B007	Production equipment usable for or specially designed or modified for production, handling, mixing, curing, casting, pressing, machining or acceptance testing of the solid or liquid rocket propellants or rocket propellant constituents and related technology.
3B008	Refrigeration units and equipment capable of cooling hydrogen or helium to -250 degrees Celsius (23K) or lower.
3B009	Continuous nitrators.
3B010	Dehydration presses.
3B011	Screw extruders usable for or specially designed or modified for high explosive extrusion.
3B012	Cutting machines for the sizing of extruded propellant.
3B013	Sweetie barrels (tumblers) 1.85 m or more in diameter and having over 227 kg product capacity;
3B014	Continuous mixers or batch mixers with provision for mixing under vacuum.
3B015	Fluid energy mills usable for grinding or milling any of the items in 3A3.
3B016	 Equipment to achieve both sphericity and uniform particle size in metal powders. a. Metal powder production equipment usable for production, in a controlled environment, of spherical or atomized materials including: b. Plasma generators (high frequency arc-jets) usable for obtaining sputtered or spherical metallic powders with organisation of the process in an argon-water environment c. Electroburst equipment usable for obtaining sputtered or spherical metallic powders in an argon-water environment

- **3B017** Sputter ion pumps
- **3B018** Technical data (including processing conditions) and procedures for the regulation of temperature, pressure or atmosphere in autoclaves or hydroclaves when used for the production of composites or partially processed composites.
- **3B019** Software specially designed or modified for the use of equipment for the production and handling of materials specified in 3A
- **3B020** Technology for the development, production or use of items in 3B

3C [Reserved]

3D Chemical and biomaterial manufacturing and handling equipment and facilities:

- **3D001** Reaction vessels, reactors or agitators, storage tanks, containers or receivers, heat exchangers or condensers, distillation or absorption columns, valves, remotely operated filling equipment, multi-walled piping, bellows, diaphragm pumps, vacuum pumps, fans, compressors, blowers, gas (including air) handling or other substance-transfer equipment wholly or partly made from any of the following materials;
 - a. Nickel or alloys with more than 40% nickel by weight
 - b. Alloys with more than 25% nickel and 20% chromium by weight (e.g. 'Hastelloy', 'Illium'. 'Incoley')
 - c. Fluoropolymers
 - d. Glass or glass lined (including vitrified or enamelled coating)
 - e. Graphite
 - f. Tantalum or tantalum alloys
 - g. Titanium or titanium alloys
 - h. Zirconium or zirconium alloys
 - i. Ceramics
 - j. Ferrosilicon
 - *Note*: 3D001 does not control the following items:
 - a. Open vessels fabricated from glass sheets (such as aquariums, water tanks etc.); or cookware, table-ware, decorative glass or ceramic items (such as vases, art objects, etc.)
 - b. Glass-ware (whether or not metal-jacketed) or glass-lined reaction vessels or reactors, whether or not equipped with agitators, provided that the total internal (geometric) volume of each vessel or reactor is greater than 20,000 litres (20 m3) or less than or equal to 100 litres (0.1 m3). Examples of the latter capacity glass or ceramic-ware include standard laboratory equipment such as test tubes, flasks, retorts etc.
- **3D002** Incinerators designed to destroy any chemicals specified in Category 1.
- **3D003** Combustors or pyrolysers capable of a heat-zone ('burner') temperature greater than 1,273 K (1000 Degree Centigrade), and in which any surfaces that come into direct contact with material coming into the containing chamber are made from, or lined with, any of the following materials:
 - a. Alloys with more than 25% nickel and 25% chromium by weight; (e.g., 'Hatelloy', 'Illium', 'Inconel', 'Incoloy')
 - b. Nickel, or alloys with more than 40% nickel by weight; or
 - c. Titanium;
 - d. Ceramics.

3D004	Equipment related to P3, P4 facilities such as protective suits and class III safety cabinets.
	No licenses shall be granted for complete containment facilities at P3, P4, containment level as specified in the World Health Organization (WHO) bio-safety manual.
3D005	Technology related to the development, production or use of items in 3D
Category 4	Nuclear-related other equipment, assemblies and components; test and production equipment; and related technology not controlled under Category 0
4A	Equipment, assemblies, components including test and production equipment
4A001	 Flow-forming machines, spin-forming machines capable of flow-forming functions, and mandrels, as follows: a. For flow forming machines refer to 5A205. b. Spin forming machines having both of the following characteristics: Three or more rollers (active or guiding); and which can be equipped with 'numerical control' units or a computer control. Rotor-forming mandrels designed to form cylindrical rotors of inside diameter between 75 and 400 mm.
	<i>Note</i> : Item 4A001a and 4A001b include machines which have only a single roller designed to deform metal plus two auxiliary rollers which support the mandrel, but do not participate directly in the deformation process.
4A002	 Machine tools, as follows, for removing or cutting metals, ceramics, or composites, which, according to the manufacturer's technical specifications, can be equipped with electronic devices for simultaneous contouring control in two or more axes: a. Machine tools for turning, that have positioning accuracies with all compensations available better (less) than 6 µm along any linear axis (overall positioning) for machines capable of machining diameters greater than 35mm;
	<i>Note:</i> Item 4A002a does not control bar machines, limited to machining only bar feed through, if maximum bar diameter is equal to or less than 42 mm and there is no capability of mounting chucks. Machines may have drilling and/or milling capabilities for machining parts with diameters less than 42 mm.
	 b. Machine tools for milling, having any of the following characteristics: 1. Positioning accuracies with all compensations available better (less) than 6 μm along any linear axis (overall positioning); or 2. Two or more contouring rotary axes;
	 Note: Item 4A002b does not control milling machines having both of the following characteristics: 1. X-axis travel greater than 2 m; and 2. Overall positioning accuracy on the x-axis worse (more) than 30 μm.
	 c. Machine tools for grinding, having any of the following characteristics: 1. Positioning accuracies with all compensations available better (less) than 4 μm along any linear axis (overall positioning); or 2. Two or more contouring rotary axes;
	<i>Note:</i> Item 4A002c does not control grinding machines as follows:1. Cylindrical external, internal, and external-internal grinding machines having all
	1000

the following characteristics:

- a. Limited to cylindrical grinding;
- b. A maximum work-piece outside diameter or length of 150 mm;
- c. Not more than two axes that can be coordinated simultaneously for contouring control; and
- d. No contouring c-axis;
- 2. Jig grinders with axes limited to x, y, c, and a, where c-axis is used to maintain the grinding wheel normal to the work surface, and the a-axis is configured to grind barrel cams;
- 3. Tool or cutter grinding machines with software specially designed for the manufacturing of tools or cutters;
- 4. Crankshaft or camshaft grinding machines.
- d. Non-wire type Electrical Discharge Machines (EDM) that have two or more contouring rotary axes and that can be coordinated simultaneously for contouring control.
- *Note:* Stated positioning accuracy levels derived under the following procedures from measurements made according to ISO 230/2 (1988) or national equivalents may be used for each machine tool model if provided to, and accepted by, national authorities instead of individual machine tests.

Stated positioning accuracy are to be derived as follows:

- 1. Select five machines of a model to be evaluated;
- 2. Measure the linear axis accuracies according to ISO 230/2 (1988);
- 3. Determine the accuracy values (A) for each axis of each machine. The method of calculating the accuracy value is described in the ISO 230/2 (1988) standard;
- 4. Determine the average accuracy value of each axis. This average value becomes the stated positioning accuracy of each axis for the model (Åx, Åy...);
- 5. Since Item 4A002 refers to each linear axis, there will be as many stated positioning accuracy values as there are linear axes;
- 6. If any axis of a machine tool not controlled by Items 4A002a, 4A002b, or 4A002c has a stated positioning accuracy of 6 μ m or better (less) for grinding machines, and 8 μ m or better (less) for milling and turning machines, both according to ISO 230/2 (1988), then the builder should be required to reaffirm the accuracy level once every eighteen months.

Technical Notes

- 1. Axis nomenclature shall be in accordance with International Standard ISO 841, Numerical Control Machines Axis and Motion Nomenclature.
- 2. Not counted in the total number of contouring rotary axes are secondary parallel contouring rotary axes the centre line of which is parallel to the primary rotary axis.
- 3. Rotary axes do not necessarily have to rotate over 360 degrees. A rotary axis can be driven by a linear device, e.g., a screw or a rack and-pinion.
- **4A003** Dimensional inspection machines, instruments, or systems, as follows:
 - a. Computer controlled or numerically controlled dimensional inspection machines having both of the following characteristics:
 - 1. Two or more axes; and
 - 2. A one-dimensional length measurement uncertainty equal to or better (less) than $(1.25 + L/1000) \mu m$ tested with a probe of an accuracy of better (less) than 0.2 μm (L is the measured length in millimetres);
 - b. 'Linear displacement' measuring instruments, as follows:

- 1. Non-contact type measuring systems with a resolution equal to or better (less) than 0.2 μm within a measuring range up to 0.2 mm;
- 2. Linear variable differential transformer (LVDT) systems having both of the following characteristics:
 - a. Linearity equal to or better (less) than 0.1% within a measuring range up to 5 mm; and
 - b. Drift equal to or better (less) than 0.1% per day at a standard ambient test room temperature ± 1 K;
- 3. Measuring systems having both of the following characteristics:
 - a. Contain a laser; and
 - b. Maintain for at least 12 hours, over a temperature range of ± 1 K around a standard temperature and a standard pressure:
 - 1. A resolution over their full scale of 0.1 µm or better; and
 - 2. With a measurement uncertainty equal to or better (less) than $(0.2 + L/2000) \mu m$ (L is the measured length in millimetres);
- *Note:* Item 4A003b3 does not control measuring interferometer systems, without closed or open loop feedback, containing a laser to measure slide movement errors of machine tools, dimensional inspection machines, or similar equipment.

Technical Note: In Item 4A003b 'linear displacement' means the change of distance between the measuring probe and the measured object.

- c. Angular displacement measuring instruments having an angular position deviation equal to or better (less) than 0.00025°;
- *Note:* Item 4A003c does not control optical instruments, such as autocollimators, using collimated light to detect angular displacement of a mirror.
- d. Systems for simultaneous linear-angular inspection of hemi-shells, having both of the following characteristics:
 - 1. Measurement uncertainty along any linear axis equal to or better (less) than 3.5 μm per 5 mm; and
 - 2. Angular position deviation equal to or less than 0.02° .

Notes: 1. Item 4A003 includes machine tools that can be used as measuring machines if they meet or exceed the criteria specified for the measuring machine function.

- 2. Machines described in Item 4A003 are controlled if they exceed the threshold specified anywhere within their operating range.
- *Technical Note:* All parameters of measurement values in this item represent plus/minus, i.e., not total band.
- 4A004 Controlled atmosphere (vacuum or inert gas) induction furnaces, and power supplies therefor, as follows:
 - a. Furnaces having all of the following characteristics:
 - 1. Capable of operation at temperatures above 1123 K (850 °C);
 - 2. Induction coils 600 mm or less in diameter; and
 - 3. Designed for power inputs of 5 kW or more;
 - *Note:* Item 4A004a does not control furnaces designed for the processing of semiconductor wafers.
 - b. Power supplies, with a specified output power of 5 kW or more, specially

	designed for furnaces specified in Item 4A004a.
4A005	 'Isostatic presses', and related equipment, as follows: a. 'Isostatic presses' as specified in 5A208; b. Dies, moulds, and controls specially designed for the 'isostatic presses' specified in Item 4A005a.
	 Technical Notes: In Item 4A005 'Isostatic presses' means equipment capable of pressurizing a closed cavity through various media (gas, liquid, solid particles, etc.) to create equal pressure in all directions within the cavity upon a work piece or material. In Item 4A005 the inside chamber dimension is that of the chamber in which both the working temperature and the working pressure are achieved and does not include fixtures. That dimension will be the smaller of either the inside diameter of the pressure chamber or the inside diameter of the insulated furnace chamber, depending on which of the two chambers is located inside the other.
4A006	 Vibration test systems, equipment, and components as follows: a. Electrodynamic vibration test systems, having all of the following characteristics: Employing feedback or closed loop control techniques and incorporating a digital control unit; Capable of vibrating at 10 g RMS or more between 20 and 2000 Hz; and Capable of imparting forces of 50 kN or greater measured 'bare table'; Digital control units, combined with software specially designed for vibration testing, with a real-time bandwidth greater than 5 kHz and being designed for a system specified in Item 4A006a; Vibration thrusters (shaker units), with or without associated amplifiers, capable of imparting a force of 50 kN or greater measured 'bare table', which are usable for the systems specified in Item 4A006a; Test piece support structures and electronic units designed to combine multiple shaker units into a complete shaker system capable of providing an effective combined force of 50 kN or greater, measured 'bare table,' which are usable for the systems specified in Item 4A006a.
Tec	hnical Note : In Item 4A006 'bare table' means a flat table, or surface, with no fixtures or fittings.
4A007	 Vacuum or other controlled atmosphere metallurgical melting and casting furnaces and related equipment, as follows: a. Arc re-melt and casting furnaces having both of the following characteristics: Consumable electrode capacities between 1000 and 20000 cm3; and Capable of operating with melting temperatures above 1973 K (1700 °C); b. Electron beam melting furnaces and plasma atomisation and melting furnaces, having both of the following characteristics: A power of 50 kW or greater; and Capable of operating with melting temperatures above 1473 K (1200 °C); c. Computer control and monitoring systems specially configured for any of the furnaces specified in Item 4A007a or 4A007b.
4A008	 Crucibles made of materials resistant to liquid actinide metals, as follows: a. Crucibles having both of the following characteristics: 1. A volume of between 150 cm3 (150 ml) and 8000 cm3 (8 litres); and 2. Made of or coated with any of the following materials, having a purity of 98% or greater by weight:

- a. Calcium fluoride (CaF2);
- b. Calcium zirconate (metazirconate) (CaZrO3);
- c. Cerium sulphide (Ce2S3);
- d. Erbium oxide (erbia) (Er2O3);
- e. Hafnium oxide (hafnia) (HfO2);
- f. Magnesium oxide (MgO);
- g. Nitrided niobium-titanium-tungsten alloy (approximately 50% Nb, 30% Ti, 20% W);
- h. Yttrium oxide (yttria) (Y2O3); or
- i. Zirconium oxide (zirconia) (ZrO2);
- b. Crucibles having both of the following characteristics:
 - 1. A volume of between 50 cm3 (50 ml) and 2000 cm3 (2 litres); and
 - 2. Made of or lined with tantalum, having a purity of 99.9% or greater by weight;
- c. Crucibles having all of the following characteristics:
 - 1. A volume of between 50 cm3 (50 ml) and 2000 cm3 (2 litres);
 - 2. Made of or lined with tantalum, having a purity of 98% or greater by weight; and
 - 3. Coated with tantalum carbide, nitride, boride, or any combination thereof.
- **4A009** Platinized catalysts specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water for the recovery of tritium from heavy water or for the production of heavy water.
- **4A010** Composite structures in the form of tubes having both of the following characteristics: a. An inside diameter of between 75 and 400 mm; and
 - b. Made with any of the materials specified in Item 3A116.
- **4A011** Frequency changers or generators having all of the following characteristics:
 - a. Multiphase output capable of providing a power of 40 W or greater;
 - b. Capable of operating in the frequency range between 600 and 2000 Hz;
 - c. Total harmonic distortion better (less) than 10%; and
 - d. Frequency control better (less) than 0.1%.
 - *Note:* Frequency changers and generators especially designed or prepared for the gas centrifuge process are controlled under Prescribed Equipment (0B Category).

Technical Note: Frequency changers in Item 4A011 are also known as converters or inverters.

4A012 Lasers, laser amplifiers and oscillators as follows:

a.

- Copper vapour lasers having both of the following characteristics:
 - 1. Operating at wavelengths between 500 and 600 nm; and
 - 2. An average output power equal to or greater than 40 W;
- b. Argon ion lasers having both of the following characteristics:
 - 1. Operating at wavelengths between 400 and 515 nm; and
 - 2. An average output power greater than 40 W;
- c. Neodymium-doped (other than glass) lasers with an output wavelength between 1000 and 1100 nm having either of the following:
 - 1. Pulse-excited and Q-switched with a pulse duration equal to or greater than 1 ns, and having either of the following:
 - a. A single-transverse mode output with an average output power greater than 40 W; or
 - b. A multiple-transverse mode output with an average output power greater

than 50 W;

or

- 2. Incorporating frequency doubling to give an output wavelength between 500 and 550 nm with an average output power of greater than 40 W;
- d. Tuneable pulsed single-mode dye laser oscillators having all of the following characteristics:
 - 1. Operating at wavelengths between 300 and 800 nm;
 - 2. An average output power greater than 1 W;
 - 3. A repetition rate greater than 1 kHz; and
 - 4. Pulse width less than 100 ns;
- e. Tuneable pulsed dye laser amplifiers and oscillators having all of the following characteristics:
 - 1. Operating at wavelengths between 300 and 800 nm;
 - 2. An average output power greater than 30 W;
 - 3. A repetition rate greater than 1 kHz; and
 - 4. Pulse width less than 100 ns;
- *Note:* Item 4A012e does not control single mode oscillators.
 - f. Alexandrite lasers having all of the following characteristics:
 - 1. Operating at wavelengths between 720 and 800 nm;
 - 2. A bandwidth of 0.005 nm or less;
 - 3. A repetition rate greater than 125 Hz; and
 - 4. An average output power greater than 30 W;
 - g. Pulsed carbon dioxide lasers having all of the following characteristics:
 - 1. Operating at wavelengths between 9000 and 11000 nm;
 - 2. A repetition rate greater than 250 Hz;
 - 3. An average output power greater than 500 W; and
 - 4. Pulse width of less than 200 ns;
- *Note:* Item 4A012g does not control the higher power (typically 1 to 5 kW) industrial CO2 lasers used in applications such as cutting and welding, as these latter lasers are either continuous wave or are pulsed with a pulse width greater than 200 ns.
 - h. Pulsed excimer lasers (XeF, XeCl, KrF) having all of the following characteristics:
 - 1. Operating at wavelengths between 240 and 360 nm;
 - 2. A repetition rate greater than 250 Hz; and
 - 3. An average output power greater than 500 W;
 - i. Para-hydrogen Raman shifters designed to operate at 16 μ m output wavelength and at a repetition rate greater than 250 Hz.
- **4A013** Valves having all of the following characteristics:
 - a. A nominal size of 5 mm or greater;
 - b. Having a bellows seal; and
 - c. Wholly made of or lined with aluminium, aluminium alloy, nickel, or nickel alloy containing more than 60% nickel by weight.
 - *Technical Note:* For valves with different inlet and outlet diameter, the nominal size parameter in Item 4A013a refers to the smallest diameter.

- **4A014** Superconducting solenoidal electromagnets having all of the following characteristics:
 - a. Capable of creating magnetic fields greater than 2 T;
 - b. A ratio of length to inner diameter greater than 2;
 - c. Inner diameter greater than 300 mm; and
 - d. Magnetic field uniform to better than 1% over the central 50% of the inner volume.
 - *Note:* Item 4A014 does not control magnets specially designed for and exported as part of medical nuclear magnetic resonance (NMR) imaging systems. ('As part of' does not necessarily mean physical part in the same shipment. Separate shipments from different sources are allowed, provided the related export documents clearly specify the 'as part of' relationship.)
- 4A015 High-power direct current power supplies having both of the following characteristics:
 - a. Capable of continuously producing, over a time period of 8 hours, 100 V or greater with current output of 500 A or greater; and
 - b. Current or voltage stability better than 0.1% over a time period of 8 hours.
- 4A016 High-voltage direct current power supplies having both of the following characteristics:
 - a. Capable of continuously producing, over a time period of 8 hours, 20 kV or greater with current output of 1 A or greater; and
 - b. Current or voltage stability better than 0.1% over a time period of 8 hours.
- **4A017** Pressure transducers capable of measuring absolute pressures at any point in the range 0 to 13 kPa and having both of the following characteristics:
 - a. Pressure sensing elements made of or protected by aluminium, aluminium alloy, nickel, or nickel alloy with more than 60% nickel by weight; and
 - b. Having either of the following characteristics:
 - 1. A full scale of less than 13 kPa and an accuracy of better than \pm 1% of full scale; or
 - 2. A full scale of 13 kPa or greater and an accuracy of better than \pm 130 Pa.
 - *Technical Notes:* 1.
 - In Item 4A017 pressure transducers are devices that convert pressure measurements into an electrical signal.
 - 2. In Item 4A017 accuracy includes non-linearity, hysteresis and repeatability at ambient temperature.
- **4A018** Vacuum pumps having all of the following characteristics:
 - a. Input throat size equal to or greater than 380 mm;
 - b. Pumping speed equal to or greater than 15 m3/s; and
 - c. Capable of producing an ultimate vacuum better than 13.3 mPa.
 - Technical Notes:
 - 1. The pumping speed is determined at the measurement point with nitrogen gas or air.
 - 2. The ultimate vacuum is determined at the input of the pump with the input of the pump blocked off.

- **4A019** Electrolytic cells for fluorine production with an output capacity greater than 250 g of fluorine per hour.
- **4A020** Rotor fabrication or assembly equipment, rotor straightening equipment, bellowsforming mandrels and dies, as follows:
 - a. Rotor assembly equipment for assembly of gas centrifuge rotor tube sections, baffles, and end caps;
 - *Note:* Item 4A020a includes precision mandrels, clamps, and shrink fit machines.
 - b. Rotor straightening equipment for alignment of gas centrifuge rotor tube sections to a common axis;
 - *Technical Note:* In Item 4A020b such equipment normally consists of precision measuring probes linked to a computer that subsequently controls the action of, for example, pneumatic rams used for aligning the rotor tube sections.
 - c. Bellows-forming mandrels and dies for producing single -convolution bellows.
 - *Technical Note:* The bellows referred to in Item 4A020c have all of the following characteristics: 1. Inside diameter between 75 and 400 mm;
 - 2. Length equal to or greater than 12.7 mm;
 - 3. Single convolution depth greater than 2 mm; and
 - 4. Made of high-strength aluminium alloys, maraging steel, or high strength fibrous or filamentary materials.
- **4A021** Centrifugal multi-plane balancing machines, fixed or portable, horizontal or vertical, as follows:
 - a. Centrifugal balancing machines designed for balancing flexible rotors having a length of 600 mm or more and having all of the following characteristics:
 - 1. Swing or journal diameter greater than 75 mm;
 - 2. Mass capability of from 0.9 to 23 kg; and
 - 3. Capable of balancing speed of revolution greater than 5000 rpm;
 - b. Centrifugal balancing machines designed for balancing hollow cylindrical rotor components and having all of the following characteristics:
 - 1. Journal diameter greater than 75 mm;
 - 2. Mass capability of from 0.9 to 23 kg;
 - 3. Capable of balancing to a residual imbalance equal to or less than 0.010 kg x mm/kg per plane; and
 - 4. Belt drive type.

4A022

- Filament winding machines and related equipment, as follows:
- a. Filament winding machines as specified in 5A206.
- b. Coordinating and programming controls for the filament winding machines specified in Item 4A022a;
- c. Precision mandrels for the filament winding machines specified in Item 4A022a.

4A023 Electromagnetic isotope separators designed for, or equipped with, single or multiple ion sources capable of providing a total ion beam current of 50 mA or greater. *Notes:*

1. Item 4A023 includes separators capable of enriching stable isotopes as well as

	 those for uranium. A separator capable of separating the isotopes of lead with a one-mass unit difference is inherently capable of enriching the isotopes of uranium with a three-unit mass difference.
	3. Item 4A023 includes separators with the ion sources and collectors both in the magnetic field and those configurations in which they are external to the field.
	<i>Technical Note:</i> A single 50 mA ion source cannot produce more than 3 g of separated highly enriched uranium (HEU) per year from natural abundance feed.
4A024	 Mass spectrometers capable of measuring ions of 230 atomic mass units or greater and having a resolution of better than 2 parts in 230, as follows, and ion sources therefor: a. Inductively coupled plasma mass spectrometers (ICP/MS); b. Glow discharge mass spectrometers (GDMS); c. Thermal ionisation mass spectrometers (TIMS); d. Electron bombardment mass spectrometers which have a source chamber constructed from, lined with or plated with materials resistant to UF6; e. Molecular beam mass spectrometers having either of the following characteristics: 1. A source chamber constructed from, lined with or plated with stainless steel or molybdenum, and equipped with a cold trap capable of cooling to 193 K (-80 °C) or less; or 2. A source chamber constructed from, lined with or plated with materials resistant to UF6; f. Mass spectrometers equipped with a micro-fluorination ion source designed for actinides or actinide fluorides. <i>Note:</i> Mass spectrometers especially designed or prepared for analyzing on-line samples of uranium hexafluoride are controlled under Prescribed Equipment (0B Category).
4A025	Specialized packings which may be used in separating heavy water from ordinary water, having both of the following characteristics:a. Made of phosphor bronze mesh chemically treated to improve wettability; andb. Designed to be used in vacuum distillation towers.
4A026	Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH2/NH3), having all of the following characteristics:
	 a. Airtight (i.e., hermetically sealed); b. A capacity greater than 8.5 m3/h; and c. Either of the following characteristics: 1. For concentrated potassium amide solutions (1% or greater), an operating pressure of 1.5 to 60 MPa; or 2. For dilute potassium amide solutions (less than 1%), an operating pressure of 20 to 60 MPa.
4A027	Turbo-expanders or turbo-expander-compressor sets having both of the following characteristics:
	 a. Designed for operation with an outlet temperature of 35 K (- 238 °C) or less; and b. Designed for a throughput of hydrogen gas of 1000 kg/h or greater.
4A028	Water-hydrogen sulphide exchange tray columns and internal contactors, as follows:
	a. Water-hydrogen sulphide exchange tray columns, having all of the following

characteristics:

- 1. Can operate at pressures of 2 MPa or greater;
- 2. Constructed of carbon steel having an austenitic ASTM (or equivalent standard) grain size number of 5 or greater; and
- 3. With a diameter of 1.8 m or greater;
- b. Internal contactors for the water-hydrogen sulphide exchange tray columns specified in Item 4A028a.
- *Note:* For columns which are especially designed or prepared for the production of heavy water, see Prescribed Equipment (0B002).
- *Technical Note:* Internal contactors of the columns are segmented trays which have an effective assembled diameter of 1.8 m or greater; are designed to facilitate counter current contacting and are constructed of stainless steels with a carbon content of 0.03% or less. These may be sieve trays, valve trays, bubble cap trays or turbo grid trays.

4A029 Hydrogen-cryogenic distillation columns having all of the following characteristics:

- a. Designed for operation at internal temperatures of 35 K (-238 °C) or less;
- b. Designed for operation at internal pressures of 0.5 to 5 MPa;
- c. Constructed of either:
 - 1. Stainless steel of the 300 series with low sulphur content and with an austenitic ASTM (or equivalent standard) grain size number of 5 or greater; or
 - 2. Equivalent materials which are both cryogenic and H2-compatible; and
- d. With internal diameters of 1 m or greater and effective lengths of 5 m or greater.
- **4A030** Ammonia synthesis converters or synthesis units, in which the synthesis gas (nitrogen and hydrogen) is withdrawn from an ammonia/hydrogen high-pressure exchange column and the synthesized ammonia is returned to said column.

4B Equipment, assemblies and components, including test and measurement equipment usable in development of nuclear explosive devices

- **4B001** Photomultiplier tubes having both of the following characteristics:
 - a. Photocathode area of greater than 20 cm^2 ; and
 - b. Anode pulse rise time of less than 1 ns.
- **4B002** Flash X-ray generators or pulsed electron accelerators having either of the following sets of characteristics:
 - a. An accelerator peak electron energy of 500 keV or greater but less than 25 MeV; and
 - b. With a figure of merit (K) of 0.25 or greater; or
 - a. An accelerator peak electron energy of 25 MeV or greater; and
 - b. A peak power greater than 50 MW.
 - *Note:* Item 4B002 does not control accelerators that are component parts of devices designed for purposes other than electron beam or X-ray radiation (electron microscopy, for example) nor those designed for medical purposes.

Technical Notes:

1. The figure of merit K is defined as: $K=1.7 \times 10^3 V^{2.65}Q$. V is the peak electron energy in million electron volts. If the accelerator beam pulse duration is less

than or equal to 1 µs, then Q is the total accelerated charge in Coulombs. If the
accelerator beam pulse duration is greater than 1 µs, then Q is the maximum
accelerated charge in 1 µs. Q equals the integral of i with respect to t, over the
lesser of 1 μ s or the time duration of the beam pulse (Q=lidt) where i is beam
current in amperes and t is the time in seconds.

- 2. Peak power = (peak potential in volts) x (peak beam current in amperes).
- 3. In machines based on microwave accelerating cavities, the time duration of the beam pulse is the lesser of 1 μ s or the duration of the bunched beam packet resulting from one microwave modulator pulse.
- 4. In machines based on microwave accelerating cavities, the peak beam current is the average current in the time duration of a bunched beam packet.
- **4B003** Multistage light gas guns or other high-velocity gun systems (coil, electromagnetic, and electrothermal types, and other advanced systems) capable of accelerating projectiles to 2 km/s or greater.
- **4B004** Mechanical rotating mirror cameras, as follows, and specially designed components therefor:
 - a. Framing cameras with recording rates greater than 225000 frames per second;
 - b. Streak cameras with writing speeds greater than 0.5 mm/µs.
 - *Note:* In Item 4B004 components of such cameras include their synchronizing electronics units and rotor assemblies consisting of turbines, mirrors, and bearings.
- 4B005 Electronic streak cameras, electronic framing cameras, tubes and devices, as follows:
 - a. Electronic streak cameras capable of 50 ns or less time resolution;
 - b. Streak tubes for cameras specified in Item 4B005a;
 - c. Electronic (or electronically shuttered) framing cameras capable of 50 ns or less frame exposure time;
 - d. Framing tubes and solid-state imaging devices for use with cameras specified in Item 4B005c, as follows:
 - 1. Proximity focused image intensifier tubes having the photocathode deposited on a transparent conductive coating to decrease photocathode sheet resistance;
 - 2. Gate silicon intensifier target (SIT) vidicon tubes, where a fast system allows gating the photoelectrons from the photocathode before they impinge on the SIT plate;
 - 3. Kerr or Pockels cell electro-optical shuttering;
 - 4. Other framing tubes and solid-state imaging devices having a fast image gating time of less than 50 ns specially designed for cameras specified in Item 4B005c.
- **4B006** Specialized instrumentation for hydrodynamic experiments, as follows:
 - a. Velocity interferometers for measuring velocities exceeding 1 km/s during time intervals of less than 10 μ s;
 - b. Manganin gauges for pressures greater than 10 GPa;
 - c. Quartz pressure transducers for pressures greater than 10 GPa.
 - *Note*: Item 4B006a includes velocity interferometers such as VISARs (Velocity interferometer systems for any reflector) and DLIs (Doppler laser interferometers).
- 4B007 High-speed pulse generators having both of the following characteristics:

- a. Output voltage greater than 6 V into a resistive load of less than 55 ohms; and
- b. 'Pulse transition time' less than 500 ps.
- *Technical Note:* In Item 4B007b 'pulse transition time' is defined as the time interval between 10% and 90% voltage amplitude
- **4B008** Detonators and multipoint initiation systems, as follows:
 - a. Electrically driven explosive detonators, as follows:
 - 1. Exploding bridge (EB);
 - 2. Exploding bridge wire (EBW);
 - 3. Slapper;
 - 4. Exploding foil initiators (EFI);
 - b. Arrangements using single or multiple detonators designed to nearly simultaneously initiate an explosive surface over an area greater than 5000 mm2 from a single firing signal with an initiation timing spread over the surface of less than $2.5 \ \mu s$.
 - *Note:* Item 4B008 does not control detonators using only primary explosives, such as lead azide.
 - Technical Note: In Item 4B008 the detonators of concern all utilize a small electrical conductor (bridge, bridge wire, or foil) that explosively vaporizes when a fast, high-current electrical pulse is passed through it. In nonslapper types, the exploding conductor starts a chemical detonation in a contacting high-explosive material such PETN as (pentaerythritoltetranitrate). In slapper detonators, the explosive vaporization of the electrical conductor drives a flyer or slapper across a gap, and the impact of the slapper on an explosive starts a chemical detonation. The slapper in some designs is driven by magnetic force. The term exploding foil detonator may refer to either an EB or a slappertype detonator. Also, the word initiator is sometimes used in place of the word detonator.
- **4B009** Firing sets and equivalent high-current pulse generators, as follows:
 - a. Explosive detonator firing sets designed to drive multiple controlled detonators specified by Item 4B008 above;
 - b. Modular electrical pulse generators (pulsers) having all of the following characteristics:
 - 1. Designed for portable, mobile, or ruggedized-use;
 - 2. Enclosed in a dust-tight enclosure;
 - 3. Capable of delivering their energy in less than 15 µs;
 - 4. Having an output greater than 100 A;
 - 5. Having a 'rise time' of less than 10 µs into loads of less than 40 ohms;
 - 6. No dimension greater than 25.4 cm;
 - 7. Weight less than 25 kg; and
 - 8. Specified to operate over an extended temperature range of 223° to 373° K (-50 °C to 100 °C) or specified as suitable for aerospace applications.
 - *Note:* Item 4B009b includes xenon flashlamp drivers.

Technical Note: In Item 4B009b5 'rise time' is defined as the time interval from 10% to

90% current amplitude when driving a resistive load.

- **4B010** Switching devices as follows:
 - a. Cold-cathode tubes, whether gas filled or not, operating similarly to a spark gap, having all of the following characteristics:
 - 1. Containing three or more electrodes;
 - 2. Anode peak voltage rating of 2.5 kV or more;
 - 3. Anode peak current rating of 100 A or more; and
 - 4. Anode delay time of 10 µs or less;
 - Note: Item 4B010a includes gas krytron tubes and vacuum sprytron tubes.
 - b. Triggered spark-gaps having both of the following characteristics:
 - 1. Anode delay time of 15 μ s or less; and
 - 2. Rated for a peak current of 500 A or more;
 - c. Modules or assemblies with a fast switching function having all of the following characteristics:
 - 1. Anode peak voltage rating greater than 2 kV;
 - 2. Anode peak current rating of 500 A or more; and
 - 3. Turn-on time of 1 μ s or less.
- **4B011** Pulse discharge capacitors having either of the following sets of characteristics:
 - a. 1. Voltage rating greater than 1.4 kV;
 - 2. Energy storage greater than 10 J;
 - 3. Capacitance greater than $0.5 \,\mu\text{F}$; and
 - 4. Series inductance less than 50 nH;
 - or
 - b. 1. Voltage rating greater than 750 V;
 - 2. Capacitance greater than $0.25 \,\mu\text{F}$; and
 - 3. Series inductance less than 10 nH.
- **4B012** Neutron generator systems, including tubes, having both of the following characteristics:
 - a. Designed for operation without an external vacuum system; and
 - b. Utilizing electrostatic acceleration to induce a tritium-deuterium nuclear reaction.

4C Technology

Technology for the development, production or use of items in 4A and 4B.

- 5 Aerospace systems, equipment including production and test equipment, related technology, and specially designed components and accessories therefor.
- 5A Rocket Systems (including ballistic missiles, space launch vehicles and sounding rockets)

5A1 Systems

5A101 Systems for missiles and rockets, including:

- a. complete rocket systems (including ballistic missile systems, space launch vehicles and sounding rockets)
- b. complete rocket stages with engines
- c. solid or liquid fuel rocket engines and their control systems including liquid propellant apogee engines designed or modified for satellites

Note: 5A101 does not control JATO units, propulsion units for flares, ejection seats, emergency escape equipment and rockets for display fireworks.

- 5A102 Subsystems and components usable in missiles and rockets including:
 - a. rocket motor cases, interior lining, insulation and nozzles;
 - b. rocket staging mechanisms, separation mechanisms and inter-stages;
 - c. liquid and slurry propellant (including oxidizers), control systems, and components thereof, specially designed or modified for resistance to vibration;
 - d. re-entry vehicles and equipment including
 - 1. Heat-shields and components thereof, fabricated of ceramic or ablative materials;
 - 2. Heat sinks and components thereof, fabricated of light weight, high heat capacity materials;
 - 3. Electronic equipment specially designed for re-entry vehicles.
 - e. guidance systems and their components such as gyros and inertial reference units;
 - f. thrust-vector control subsystems including methods of achieving thrust vector control such as flexible nozzle, fluid or secondary gas injection, movable engine or nozzle, deflection of exhaust gas stream (jet vanes or probes) and use of thrust tabs;
 - g. hybrid rocket motors and components thereof;
 - h. safing, arming, fusing and firing mechanisms for weapons or warhead.
 - i. software specially designed for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures.

5A2 Production and Test Equipment.

- **5A201** Transonic, supersonic, hypersonic wind tunnels; gun tunnels; aeroballistic ranges.
- 5A202 Test and production equipment and facilities designed to handle systems in 5A1.
- **5A203** Test benches/stands, usable for complete rocket systems and subsystems (including ballistic missile systems, space launch vehicles and sounding rockets) which have the capacity to handle solid or liquid propellant rockets, motors or engines, or which are capable of simultaneously measuring the three axial thrust components.
- **5A204** Vibration test equipment (vibration test systems and vibration thrusters) and components using digital control techniques and feedback or closed loop test equipment and software thereof (Refer 4A006).
- 5A205 Flow-forming machines and specially designed components thereof which, according to the manufacturers technical specification,
 - 1. can be equipped with numerical control units or a computer control, even when not equipped with such units at delivery; and
 - 2. have more than two axes which can be coordinated simultaneously for contouring control.
 - *Note:* Item 5A205 includes machines which have only a single roller designed to deform metal plus two auxiliary rollers which support the mandrel, but do not

participate directly in the deformation process.

- **5A206** Filament winding machines for which the motion for positioning wrapping and winding fibres can be coordinated and programmed in two or more axes; precision mandrels thereof, and coordinating and programming controls;
- **5A207** Tape-laying machines of which the motions for positioning and laying tape and sheets can be coordinated and programmed in two or more axes;
- 5A208 Isostatic presses having all of the characteristics of maximum working pressure equal to or greater than 69 MPa or greater; designed to achieve and maintain a controlled thermal environment of 600°C or greater; and possessing a chamber cavity with an inside diameter of 152 mm or greater.
- **5A209** Environmental chambers simulating vibration environments, with altitudes equal to or greater than 15 km, or temperature ranging between minus 50 and plus 125 degrees centigrade.
- **5A210** Environmental chambers simulating acoustic pressure level of 140 dB or greater or rated acoustic power output of 4 KW or greater, with altitudes equal to or greater than 15 km, or temperature ranging between minus 50 and plus 125 degrees centigrade.
- 5A211 Accelerators delivering electro-magnetic radiation produced by Bremsstrahlung from accelerated electrons.
- 5A212 Pulsed electron accelerators
- 5A213 Radial ball bearings having all tolerances specified in accordance with ISO 492 Tolerance Class 2 or better and having all the following characteristics:
 - a. An inner ring bore diameter between 12 and 50 mm;
 - b. An outer ring outside diameter between 25 and 100 mm; and
 - c. A width between 10 and 20 mm.
- 5A214 Liquid propellant tanks specially designed for the propellants controlled in Item 3A3 or other liquid propellants used in the systems specified in 5A and 5B.
- 5A215 Production facilities and production equipment specially designed for equipment or materials for 5A101 and 5A102.
- **5A216** Production equipment and specially designed components thereof, for the production, handling or acceptance testing of liquid propellants or propellant constituents as referred in 3A3;
- **5A217** Launch and ground support equipment and facilities usable for rocket systems (including ballistic missile systems, space launch vehicles and sounding rockets), unmanned airborne system and cruise missiles as follows:
 - a. apparatus, devices and vehicles, designed or modified for the transport, handling, control, activation and launching of the systems.
 - b. gravity meters (gravimeters), gravity gradiometers, and specially designed components thereof, designed or modified for airborne or marine use usable for complete rocket systems and for complete unmanned aerial vehicle systems (including cruise missile systems target drones and reconnaissance drones)

- c. telemetry and tele-command equipment, including ground equipment, designed or modified for complete rocket systems and complete unmanned aerial vehicle systems and cruise missiles, excluding control equipment designed or modified for manned aircraft or satellites, control ground based equipment designed or modified for terrestrial or marine application, and control equipment designed for commercial, civil or 'safety of life' (e.g. data integrity, flight safety) GNSS services
- d. radomes designed to withstand a combined thermal and pressure shock usable in protecting rocket systems, unmanned aerial vehicles and cruise missiles against nuclear effects (eg. electro-magnetic pulse (EMP), X-rays, combined blast and thermal effects).
- e. Software which processes post-flight, recorded data, enabling determination of vehicle position throughout its flight path.
- **5A218** Systems, specially designed for radar cross section measurement, usable for rocket systems (including ballistic missile systems, space launch vehicles and sounding rockets), unmanned airborne system and cruise missiles and their subsystems.

5A3 Technology

- **5A301** Technology related to the development, production, testing and use of items in 5A1 and 5A2.
- 5A302 Software for the development, production, and testing and use of items in 5A1 and 5A2.
- **5A303** Software which coordinates the function of more than one subsystem, specially designed or modified for use in the systems specified in 5A1 and 5A2.

5B Unmanned aerial vehicles including cruise missiles, target drones and reconnaissance drones and related equipment, and specially designed components therefor:

- a. Unmanned aerial vehicles including Remotely Piloted air Vehicles (RPVs) and autonomous programmable vehicles;
- b. Associated launchers and ground support equipment;
- c. Related equipment for command and control.
- d. Complete unmanned aerial vehicle systems (including cruise missile systems, target drones and reconnaissance drones)
- e. Light weight Turbojet and turbofan engines (including turbo compound engines).
- f. Ramjet / Scramjet / pulse jet/ combined cycle engines, including devices to regulate combustion, and specially designed components.
- g. Complete unmanned aerial vehicle systems having an autonomous flight control and navigation capability or capability of controlled flight out of the direct vision range involving a human operator, designed or modified to incorporate an aerosol dispensation mechanism, or capable of carrying elements of a payload in the form of a particulate or liquid other than fuel components of such vehicles.
- *Note:* This category does not control unpowered airborne vehicles such as gliders, hot air balloons etc.
- h. Safing, arming, fusing and firing mechanisms for weapons or warhead.
- i Production facilities and Production equipment specially designed for equipment or materials for 5B.
- j. Technology, for the development, production or use of equipment, materials or software specified for 5B.

k. Software, for the development, production or use of equipment or materials specified for 5B. 1. Software which coordinates the function of more than one subsystem, specially designed or modified for use in the systems specified in 5B. 5C Avionics and navigation systems designed or modified for use in, or usable in rocket systems (including ballistic missile systems, space launch vehicles and sounding rockets), unmanned aerial vehicles and cruise missiles 5C001 Guidance systems and their components such as gyros and inertial reference units, and specially designed components therefor; 5C002 Integrated flight instrument systems which include gyrostabilizers or automatic pilots, and specially designed components therefor; 5C003 Compasses (including gyro-astro compasses), gyroscopes, accelerometers and inertial equipment and specially designed software thereof and specially designed components therefor. 5C004 Inertial or other equipment using accelerometers or systems incorporating such equipment, and specially designed integration software therefor; 5C005 Encrypted telemetry systems, equipment and software thereof. 5C006 Flight control system (including servo valves) designed or modified for the systems as follows: Hydraulic, mechanical, electro-optical or electro-mechanical flight control a. systems (including fly-by-wire systems); Attitude control equipment; b. Design technology for integration of flight control, guidance, and propulsion c. data into a flight management system for optimisation of rocket system trajectory. d. Specially designed test, calibration, and alignment thereof. 5C007 Integrated navigation system incorporating an inertial measurement device (example: an attitude and heading reference system, inertial reference unit, or inertial navigation system); one or more external sensor used to update the position and/or velocity, either periodically or continuously throughout the flight (example: satellite navigation receiver, radar altimeter and/or Doppler radar); integration hardware and software **5C008** Production equipment and other test, calibration and alignment equipment, designed or modified to be used with equipment specified in 5C001 - 5C004 and 5C007. 5C009 Equipment used to characterize mirrors for laser gyros such as scatterometer, reflectometer and profilometer and for other inertial equipments such as Inertial measurement unit (IMU Module) tester, IMU Platform tester, IMU stable element handling fixture, Gyro tuning test station, Gyro dynamic balance station, Gyro runin/motor test station, Gyro evacuation and filling station, Centrifuge fixture for gyro bearings, Accelerometer axis align station and Accelerometer test station. 5C010 Avionics equipment and embedded or specially designed software and components thereof, including but not limited to: Radar and laser radar system including altimeter; a. b. Electronic assemblies and components;

- c. Design technology for protection of avionics and electrical subsystems against electromagnetic pulse (EMP) and electromagnetic interference (EMI) hazards from external sources.
- d. Passive sensors for determining bearings to electromagnetic sources (direction finding devices) or terrain characteristics
- e. Receiving equipment for Global Navigation Satellite Systems (GNSS: e.g. GPS, GLONASS, GALILEO), capable of operating at aircraft speeds and altitudes or above.
- f. Terrain contour mapping equipment, Scene mapping and correlation (both digital and analogue) equipment, Doppler navigation radar equipment, Passive interferometer equipment and Imaging sensor equipment (both active and passive)
- g. Design technology for electromagnetic shielding systems, the configuration of hardened electrical circuits and subsystems and for the determination of hardening criteria.
- **5C011** On-board electronic equipment, devices and their design and manufacturing know-how (except warhead fuses, timers and sequencers), and embedded or specially designed software thereof.
- **5C012** Detectors designed or modified, in protecting rocket systems, unmanned aerial vehicles and cruise missiles against nuclear effects (eg. electro-magnetic pulse (EMP), X-rays, combined blast and thermal effects).
- **5C013** Radiation Hardened microcircuits usable in protecting rocket systems, unmanned aerial vehicles and cruise missiles against nuclear effects (e.g. electro-magnetic pulse (EMP), X-rays, combined blast and thermal effects).
- **5C014** Precision tracking systems using a code translator installed on the rocket or unmanned aerial vehicle in conjunction with either surface or airborne references or navigation satellite systems to provide real-time measurement of inflight position and velocity; Range instrumentation radars including associated optical/infrared trackers and related software.
- **5C015** Balancing machines capable of balancing rotors/assemblies and correcting unbalance in two planes or more.
- **5C016** Indicator heads or balancing instrumentation designed or modified for use with balancing machines
- **5C017** Motion simulators/rate tables (equipment capable of simulating motion) having all of the following characteristics two axes or more slip rings capable of transmitting electrical power and/or signal information
- **5C018** Position tables (equipment capable of precise rotary positioning in any axes) having two axes or more and a position accuracy equal to or better than 5 arc second
- **5C019** Centrifuges capable of imparting accelerations and having slip rings capable of transmitting electrical power and signal information
- **5C020** Design technology for integration of air vehicle fuselage, propulsion system and lifting control surfaces designed or modified for the unmanned aerial vehicle systems to optimize aerodynamic performance throughout the flight regime of an unmanned aerial vehicle system

- **5C021** Design technology for integration of the flight control, guidance, and propulsion data into a flight management system, designed or modified for the complete rocket systems, unmanned aerial vehicles and cruise missiles for optimization of the trajectory.
- **5C022** Technology for the development, production, or use of items in 5C.
- **5C023** Software for the development, production and use of items in 5C.
- **5C024** Software specially designed or modified for use in the systems specified in 5C.

5D Manned-aircraft, aero-engines, related equipment and components:

- *Note:* This category does not control foreign military aircraft or an Indian aircraft carrying a military registration number.
- **5D001** Combat aircraft and specially designed components thereof;
 - a. Other aircraft specially designed or modified for military use, including military reconnaissance, assault, military training, transporting and air-dropping troops or military equipment, logistics support, and specially designed components thereof;
 - b. Aero-engines specially designed or modified for military use, and specially designed components thereof;
 - c. Airborne equipment, including airborne refuelling equipment, specially designed for use with the aircraft controlled by 5D001a or 5D001b or the aeroengines controlled by 5D001c, and specially designed components thereof;
 - d. Pressure refuellers, pressure refuelling equipment, equipment specially designed to facilitate operations in confined areas and ground equipment, developed specially for aircraft controlled by 5D001a or 5D001b or for aero-engines controlled by 5D001c;
 - e. Pressurized breathing equipment and partial pressure suits for use in aircraft anti-g suits, military crash helmets and protective masks, liquid oxygen converters used for aircraft or missiles, and catapults and cartridge actuated devices for emergency escape of personnel from aircraft;
 - f. Parachutes:
 - 1. Paragliders, drag parachutes, drogue parachutes for stabilization and attitude control of dropping bodies, (e.g. recovery capsules, ejection seats, bombs);
 - 2. Drogue parachutes for use with ejection seat systems for deployment and inflation sequence regulation of emergency parachutes;
 - 3. Recovery parachutes for guided missiles, drones or space vehicles;
 - 4. Approach parachutes and landing deceleration parachutes.
 - g. Automatic piloting systems for parachuted loads, equipment specially designed or modified for military use for controlled opening jumps at any height, including oxygen equipment.

Note 1: 5D001b does not control aircraft or variants of those aircraft specially designed for military use which:

- 1. Have been certified for civil use by the civil aviation authority of India, and
- 2. Are not configured for military use and are not fitted with equipment or attachments specially designed or modified for military use;
- *Note 2*: The control in 5D001b and 5D001c on specially designed components and related equipment for non-military aircraft or aero-engines modified for military use applies

only to those military components and to military related equipment required for the modification to military use.

- 5E Microlight aircraft and powered 'hang-gliders'
- Category 6 [Reserved]

Category 7: Electronics, computers, and information technology including information security

- 7A Electronics
- 7A001 High-power microwave devices including tubes, travelling wave tubes (TWT) and phase shifters, and continuous wave and pulsed high power microwave travelling wave tube amplifiers (TWTA) operating at frequencies higher than 31 GHz, and their power supplies.
- 7A002 Microwave monolithic integrated circuits (MMIC) operating at frequencies above 3 GHz and surface acoustic wave (SAW) devices operating at frequencies above 2.5 GHz.
- 7A003 Phased array antennas and their elements
- 7A004 Radiation-hardened microprocessors, field programmable gate arrays and solid state memory devices

7A005 Microprocessor microcircuits, microcomputer microcircuits, microcontroller microcircuits, storage integrated circuits manufactured from a compound semiconductor, analogue-to-digital converter, and digital-to-analogue converter, printed circuit boards or modules, electro-optical or optical integrated circuits designed for signal processing, field programmable logic devices, neural network integrated circuits, custom integrated circuits for which either the function is unknown or the control status of the equipment in which the integrated circuit will be used is unknown, Fast Fourier Transform (FFT) processors, electrical erasable programmable read-only memories (EEPROMs), flash memories or static random-access memories (SRAMs), having any of the following:

- a. Rated for operation at an ambient temperature above 398 K (+125°C);
- b. Rated for operation at an ambient temperature below 218 K (-55°C); or
- c. Rated for operation over the entire ambient temperature range from 218 K (-55°C) to 398 K (+125°C).
- 7A006 Radiation-hardened analogue-to-digital and digital-to-analogue converter integrated circuits, as follows:
 - a. Analogue-to-digital converters having any of the following:
 - 1. A resolution of 8 bit or more, but less than 12 bit, with a total conversion time of less than 5 ns;
 - 2. A resolution of 12 bit with a total conversion time of less than 200 ns; or
 - 3. A resolution of more than 12 bit with a total conversion time of less than $2 \mu s$;
 - b. Digital-to-analogue converters with a resolution of 12 bit or more, and a settling time of less than 10 ns.
- 7A007 Detector units operating in the thermal infrared, ultraviolet, x-ray and gamma ray spectrum.
- 7A008 Focal plane assemblies for imaging cameras operating in the visible, near and thermal

infrared spectrum

7A009 Technology for the development, production or use of items specified in 7A005 and 7A006.

7B Electronic test equipment

- **7B001** Frequency synthesized signal generators with maximum frequency greater than 31 GHz
- 7B002 Network analysers operating at frequencies above 40 GHz

7C Computers

- 7C001 Digital computers and software as follows:
 - a. Digital computers having a composite theoretical performance (CTP) exceeding 75000 (seventy-five thousand) million theoretical operations per second (Mtops)
 - b. Software, and/or computer inter-connection schemes, whether or not co-supplied with (a) designed to 'parallelise' digital computers (individually of any CTP rating) enabling a CTP of more than 75000 Mtops to be achieved by the 'parallelised' configuration

Technical notes:

- 1. The Composite Theoretical Performance (CTP) rating is to be calculated in accordance with the calculation scheme separately notified in this regard.
- 2. Individual digital computers each with a CTP rating of 75000 Mtops or less do not require an export license to any destination or end-user, unless supplied with (b) above.
- 3. Digital Computers' includes (1) hybrid computers incorporating 'digital computers' or specified in (a) above, systolic array computers, neural computers, optical computers, vector processors, digital signal processors, logical processors (2) digital electronic equipment designed for 'image enhancement' or signal processing other than when supplied as integral adjuncts to medical imaging (eg CAT-scanning) equipment.
- **7C002** Analogue, digital or hybrid computers, digital differential analysers, and specially designed software therefor, for use in, or for modelling, simulation, or design integration of rocket systems, unmanned aerial vehicles and cruise missiles.
- 7C003 Technology for the development, production or use of items in 7C002.

7D Information technology including information security

- 7D001 Data processing security equipment, data security equipment and transmission and signalling line security equipment, using ciphering processes.
- 7D002 Identification, authentication and keyloader equipment and key management, manufacturing and distribution equipment.
- 7E [Reserved]

ANNEXURE - 1

PROFORMA FOR

INFORMATION TO BE SUBMITTED BY SUPPLIER IN DOMESTIC TARIFF AREA (DTA) TO DEVELOPMENT COMMISSIONER, SEZ FOR SUPPLY OF SCOMET ITEMS TO SEZ UNITS UNDER NOTIFICATION NO. 93 (RE-2010)/2009-2014 DATED 6TH JANUARY, 2012

(Report to be submitted within 1(one) week of the supplies getting effected)

2.	Name and address of the Supplier :							
3.	Importer-Expo	rter Code (IEC	C):					
4.	Details of SCO	MET items sup	plied :					
Sl.	Description	SCOMET	ITC(HS)	Qty	SEZ Unit	Date of	FOB	Value
No.	of items	Category	Code, if available		to which supplied	Supply	Rs	US\$
	<u> </u>	l						
5.	I hereby declar	e that I am aut	horized to ver	ify and	l sign this de	claration.		
Date :								
					Signature :			
Place :					Name :			
					Designation	:		
					Telephone :			
					FAX :			

ANNEXURE - 2

PROFORMA FOR

INFORMATION TO BE SUBMITTED ANNUALLY(*) BY DEVELOPMENT COMMISSIONER, SEZ TO SCOMET CELL, DGFT (HQRS), DEPARTMENT OF COMMERCE, UDYOG BHAWAN, MAULANA AZAD ROAD, NEW DELH – 110011, UNDER NOTIFICATION NO. 93 (RE-2010)/2009-2014 DATED 6TH JANUARY, 2012

1. N	1. Name of the SEZ :									
2. Details of SCOMET items supplied from DTA :										
Sl. No.	Description of items	SCOMET Category	ITC(HS) Code, if	Qty	Name of Supplier	Import er-	SEZ Unit to	Date of Supply	FOB Value	
			available			Export er Code (IEC)	which supplied		Rs	U S \$
Official Seal/Stamp : Date : Signature of Development Commissioner/ authorized officer of the SEZ										
	Name :									
	Designation :									
	Telephone :									
	FAX :									
	Email address :									

(*) Note : Report to be submitted by 15th May of every financial year for the supplies effected during the preceding financial year. [e.g. Report for the period 1st April 2011 to 31st March 2012 must be submitted by 15th May 2012.]

Appendix-4

Public Notice No. 21 / 2009-14 Dated 1st December, 2009

Subject: Export of Finished Leather- Revised Leather Norms

In exercise of the powers conferred by Section 5 of the Foreign Trade (Development & Regulation) Act, 1992 (No 22 of 1992), the Director General of Foreign Trade hereby specifies, for the purpose of the entry "Finished Leather all kinds" appearing at *Serial No:142, Chapter 41, Schedule 2 – Export Policy, of the Foreign Trade Policy 2009-14*, that the items mentioned in column 2 of the table hereunder shall constitute "Finished Leather" and the same may be exported without a license but subject to the terms and conditions specified against each item in column 3 of the table hereunder."

Sl. No.	Description of item	Manufacturing Norms Conditions.				
1	2	3				
Ι	Leathers with finishing coat (All substrates – Goat and Sheep skins and Bovine hides/sides calf skins including splits)	 a. Tanning b. Dyeing (optional) c. Fatliquoring d. Finishing coat 				
П	Suede Leathers (All substrates including splits)	 a. Tanning b. Dyeing in light/pastel/medium/dark shades (in case of doubt, the presence of dye to be ascertained by chromatographic technique) c. Fatliquoring d. Buffing to produce suede nap e. Shaving/snuffing of the grain along the backbone 2 inches on either side in the case of goat and sheep skins and in the case of bovine hides/sides and calf skins all over the grain side 				
ш	Nubuck Leathers (All substrates including butts and bends)	 a. Tanning b. Dyeing in light/pastel/medium/dark shades (in case of doubt, the presence of dye to be ascertained by chromatographic technique) c. Fatliquoring d. Buffing on the grain to produce nap with writing effect (or) Buffing on the grain and presence of oil in the case of oil nubuck leather 				
IV	Bovine hides/sides based Lining Leathers:	 Thickness less than or equal to 1.0 mm a. Tanning b. Dyeing in light/pastel/medium/dark shades (in the case of doubt, the presence of dye to be ascertained by chromatographic technique c. Fatliquoring 				
v	Gloving leathers (All substrates):	 Thickness should be less than or equal to 1.0 mm and run should be minimum of 15% a. Tanning b. Dyeing (optional) c. Fatliquoring 				

		d. Wax coat
VI	Burnishable Leathers (All substrates including butts and bends)	 a. Tanning b. Dyeing in light/pastel/medium/dark shades (in case of doubt, the presence of dye to be ascertained by chromatographic technique) c. Fatliquoring d. Wax coat e. Burnishable effect on rubbing (Minimum CIE ΔL value of -5.0 on 10 dry rubbing on SATRA Fastness tester or any other fastness tester as measured on a Reflectance spectrophotometer)
VII	Pull Up Leather – Wax/Oil (All substrates including butts and bends)	 a. Tanning b. Dyeing in light/pastel/medium/dark shades(in case of doubt, the presence of dye to be ascertained by chromatographic technique) c. Fatliquoring d. Wax coat (or) Oil coat e. Pull up effect (Minimum CIE ΔL value of +5.0 as measured on a reflectance spectrophotometer)
VIII	Heavy Leathers including sole leather, harness and belting leathers (Bovine hides/sides including butts and bends)	 Heavy substance with thickness of 3.0 mm or more and with minimum of apparent density 0.9 gm/cc) a. Vegetable Tanning b. Oiling/stuffing c. Rolling / Plating
IX	Hair/wool on leathers (All substrates including rabbit skins)	 a. Tanning b. Dyeing(optional) c. Fatliquoring d. Wool/hair combing
Х	Laminated Leathers (All substrates including splits)	 a. Tanning b. Dyeing(optional) c. Fatliquoring d. Application of foil/film/lamination
XI	Chamois Leathers (All substrates)	 a. Aldehyde and fish oil combination tanning b. Buffing to produce suede nap c. Complete shaving/snuffing of the grain Should have pronounced change in the grain pattern/texture of grain
XII	Shrunken Grain/Washed leathers (All substrates).	a. Tanningb. Dyeing (in the case of doubt, the presence of

XIII		c. d.	dye to be ascertained by chromatographic technique Fatliquoring Wax coat
	Wax/Oil coated leathers	a.	Tanning
		b.	Dyeing in medium/dark shades
		с.	Fatliquoring
		d.	Wax coat (or) Oil Coat

NOTE: Any new type of finished leather not covered under the above categories shall be permitted for export, subject to testing and certification by Central Leather Research Institute (CLRI)

DEFINITIONS OF MANUFACTURING OPERATIONS

Tanning – Tanning with one or more than one kind of tanning agent, such as mineral tanning and vegetable tanning and / or syntan tanning and/ or resin tanning and/or aldehyde tanning, oil tanning in any sequence and or any new type of tanning.

Dyeing – Treating the leather with a solution of dye/s to impart a colour. In case of doubt the presence of dye should be ascertained by extracting dye from leather using suitable solvent mixture and by running thin layer chromatography (TLC)

Note: 1:- Testing for the presence of dye:

Organic layer separated from Butanol, acetic acid and water mixture taken in the ratio 4: 1: 5, using a separating funnel is taken as the eluting solvent for TLC analysis.

Dye is extracted from the leather using dichloromethane and methanol (1: 1) mixture. The cut pieces of leathers are heated in a water bath with the solvent mixture for few miniutes. The extracted dye is kept as a spot on the TLC paper and the strip is kept in the eluting solvent such that the dye spot lies above the solvent level. The presence of the dye is confirmed by its movement to a considerable distance and from the formation of a dye curve or peak on the TLC paper.

Fatliquoring – Treating the leather with oil and/or fat, emulsified in water for rendering the leather soft

Finishing Coat – Finishing coat shall contain a film forming material/ binder in combination with colorants such as pigments or dyes or a combination of both. The film forming material/binder shall comprise materials singly or in combination such as proteins or synthetic acrylic or polyurethane, vinyls lacquers or lacquer emulsions.

If necessary, microscopic examination of the surface at minimum 100 times magnification shall be carried out to detect the finishing coat.

Note 2: - Microscopic examination for finish coat:

Binocular stereoscopic microscope with (two paired) objectives capable of viewing the objects at a total magnification of 100X will be required. Stereoscopic microscope gives a three dimensional view of the object.

Leather sample to be examined is placed on the stage of the microscope with the grain facing the objectives and then the surface is focused. Two or three places in each of the five locations namely butt, belly (one each side of the back bone line) and neck or shoulder examined.

To the naked eye, the grain surface may appear to be plain, but when focused under microscope, innumerable depressions can be seen on the surface. These depressions are due to cleavages lines and hair pores. If finish coat is sprayed on the grain surface, it will be present throughout, including depressed areas and both the depressed and other areas will produce the same type of reflection which is clearly visible under the microscope.

Buffing – An operation to produce a clean flesh surface to produce nap on leather by the action of emery wheel or a buffing machine

Shaving – A mechanical operation of reducing the substance of leather to uniform thickness by scrapping off layers from flesh or grain side

Snuffing – The process of buffing the grain side of leather usually done by buffing machine, with visible evidence of removal of grain

Oiling – The operation of rubbing oil on the grain side of wet or sammed leather with the object of making the leather soft and pliable; in the case of vegetable tanned leather also to protect the color of tannage from darkening by oxidation.

Wax coat – Wax particulate matter should be seen under Microscope (100x) after the application of xylene on the grain surface.

Note 3:-Microscopic examination of wax coat:

A small drop of xylene is placed on the surface of the leather. The surface is scrapped gently using a glass rod. Leather is left for 2-3 minutes. The dried leather surface is observed under microscope for the presence of wax crystals on the surface.

Burnishable Effect – Rubbing on grain surface of leather should show a distinct gloss with a darkening of the shade giving rise to a burnishing effect. Minimum CIE ΔL value of – 5.0 on 10 dry rubbing on SATRA or any other fastness tester

Pull up Effect – Leather shall produce a distinct pull-up effect showing a contrast light color from the base minimum CIE Δ L value of +5 as measured by the reflectance spectrophotometer.

Wool Combing- The operation through which wool entanglements are released.

Application of foil/film – Acrylic/ PVC/PU foil or film

Rolling – The operation of rolling the heavy leathers like sole leather using a heavy roller with rolling machine.

STATE CODES

All the exporters are required to indicate the state of origin of their export product in their shipping bills. For this purpose the following codes are to be utilized.

Code No.	Name of the State
01	ASSAM
02	MEGHALAYA
03	MIZORAM
06	BIHAR
07	JHARKHAND
09	ARUNACHAL PRADESH
10	WEST BENGAL
14	NAGALAND
15	MANIPUR
16	ORISSA
17	SIKKIM
18	TRIPURA
19	ANDAMAN & NIKOBAD
20	UTTAR PRADESH
21	UTTARANCHAL
29	DELHI
30	PUNJAB
34	HARYANA
39	CHANDIGARH
44	JAMMU & KASHMIR
46	HIMACHAL PRADESH
50	RAJASTHAN
54	GUJARAT
60	MAHARASHTRA
67	DAMAN & DIU
68	GOA
69	DADRA & NAGAR HAVELI
70	MADHYA PRADESH
71	CHATTISGARH
80	ANDHRA PRADESH
84	KARNATAKA
89	LAKSHADWEEP
90	TAMIL NADU
96	KERALA
99	PONDICHERRY