- (f) global best practices in respect of each product granted with the Ecomark under these rules.
- 12. Verifiers. (1) The Central Pollution Control Board shall register such entities having qualification and experience in the field of environment and matters relating to Ecomark as Verifiers as it may consider necessary for the purposes of verification of the products for the grant of Ecomark and its renewal under these rules.
- (2) Every Verifiers shall submit an annual report to the Central Pollution Control Board on or before the 31st May of the succeeding year in respect of activities done by such Verifier in the previous year.
- 13. Compliance of products with Ecomark. -(1) The Central Pollution Control Board may on its own volition or on a complaint received by it, inspect and verify by itself or through a registered agency, any product that has been granted Ecomark for compliance with the conditions under these rules.
- (2) The Central Pollution Control Board shall register such agencies, having relevant expertise and experience for inspection and verification of Ecomark criteria in respect of each product, as it may consider necessary for the purposes of these rules.
- (3) The registered agency shall, upon such inspection and evaluation of the product, submit its report to the Central Pollution Control Board.
- (4) The Central Pollution Control Board shall inform the holder of the Ecomark of any complaints in respect of the product and shall require him to submit his reply.
- (5) The holder of Ecomark shall allow the Central Pollution Control Board or the registered agencies to undertake such inspection and verification as may be considered necessary for ensuring compliance with the conditions under these rules.
- (6) The holder of the Ecomark shall grant access to the premises in which the product concerned is produced or kept to the Central Pollution Control Board and the registered agency.
- (7) Every registered agency shall submit an annual report to the Central Pollution Control Board on or before the 31st May of every year in respect of the activities undertaken by it in the previous year.
- 14. Role of State Government/Union Territories. (1) The State Pollution Control Board and the Pollution Control Committee shall create awareness about these rules through media, publications, advertisements, posters or by such other means of communication as may be considered appropriate.
- (2) The State Pollution Control Board and the Pollution Control Committee shall undertake activities, including in respect of awareness, for effective implementation of these rules as may be recommended by the Steering Committee and approved by the Central Government.
- 15. Committee of Implementation. (1) A Committee shall be constituted under chairpersonship of Chairman, Central Pollution Control Board to recommend measures to Steering Committee for effective implementation of the Ecomark Rules;
- (2) The Committee shall monitor the implementation of the Ecomark Rules and also take such measures as required for removal of difficulties;
- (3) The Committee shall also be tasked with the guiding and providing recommendations for the development and operation of the online portal;
- (4) The Committee shall comprise of representatives of the concerned Ministries/Departments, representatives of industry associations and other relevant stakeholders. The Chairperson of the Committee may co-opt any stakeholder/expert to this Committee.

# THE FIRST SCHEDULE

[See rules 2(d) and 3(1)(f)]

### PRODUCTS AND CRITERIA FOR GRANT OF ECOMARK

	Product	Criteria for grant of Ecomark
(1)	(2)	(3)
1.	Architectural	1. GENERAL REQUIREMENTS:
	paints and powder coating	1.1 All formulations of paints shall meet relevant standards of Bureau of Indian Standards pertaining to quality and performance.
		1.2 The product manufacturer must produce the consent clearance as per the provisions of Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981 along with the authorisation, if required, under Environment (Protection) Act, 1986 and rules made thereunder to

	Bureau of Indian Standards while applying for the ECOMARK.
	1.3 The product must display a list of critical ingredients in descending order of
	quantity present. The list of such ingredients shall be identified by Bureau of Indian Standards.
	1.4 The product packaging may display in brief the criteria based on which the product has been labelled as Environment Friendly.
	1.5 The product may be sold along with instructions for proper use so as to maximise product performance and minimise wastage.
	1.6 The material used for product packaging shall be recyclable, reusable or biodegradable.
	2. SPECIFIC REQUIREMENTS:
	2.1. Water based Coatings (inclusive of dry distemper and cement paints)
	2.1.1 The product shall not contain more than 5 per cent volatile organic compounds (VOC).
	2.1.2 Product shall not be formulated with mercury and mercury compounds or be tinted with pigments of lead, cadmium, chromium VI and their oxides. Excluded are natural impurities or impurities entailed by the production process up to the amount of 0.1 percent by weight which are contained in the raw material.
	2.1.3 The product shall not be formulated or manufactured with:
	i. Free formaldehyde in excess of 10 mg per kg. of paint
	ii. halogenated solvents
	iii. benzene & poly-aromatic hydrocarbons
	iv. and other aromatic hydrocarbons
	2.2. Powder Coatings
	2.2.1 The product shall be free from any VOC (Volatile Organic Compounds). Product shall not be formulated with mercury and mercury compounds or be tinted with pigments of lead, cadmium, chromium VI and their oxides. Excluded are natural impurities or impurities entailed by the production process up to the amount of 0.1 percent by weight which are contained in the raw material.
	2.2.2 The product shall not be formulated or manufactured with free formaldehyde in excess of 10 mg per kg of paint.
	2.3 Solvent based high solid coatings.
	2.3 Solvent based high solid coatings.  2.3.1 The product shall not contain volatile organic compounds (VOC) in excess of 380 g/l.
	2.3.2 Product shall not be formulated with mercury and mercury compounds or be tinted with pigments of lead, cadmium, chromium VI and their oxides. Excluded are natural impurities or impurities entailed by the production process up to the amount of 0.1 percent by weight which are contained in the raw material.
	2.3.3 The product shall not be formulated or manufactured with:
	i. free formaldehyde in excess of 10 mg per kg. of paint
	ii. halogenated solvents
	iii. benzene & poly-aromatic hydrocarbons, and
	iv. other aromatic hydrocarbons in excess of 10 percent by weight
2 Cosmetics	1. GENERAL REQUIREMENTS:
	1.1 All the products manufactured shall meet the requirements of following Indian
	Standards of BIS pertaining to safety, quality and performance:
	i. Skin Powder IS 3959:1978
	ii. Skin Powder for infant IS 5399:1978
	iii. Tooth Powder IS 5383:1978
	iv. Tooth Paste IS 6356:1993
	v. Skin Cream IS 6608:1978
	vi. Hair oil IS 7123:1993
	vii. Shampoo Soap based IS 7669:1990

Shampoo Synthetic Detergent based IS 7884:1992 ix. Hair Cream IS 7679:1978 x. Oxidation Hair dye liquid IS 8481:1993 xi. Cologne IS 8482:1977 xii. Nail Polish (Nail Enamel) IS 9245:1993 xiii. After Shave Lotion IS 9255:1979 xiv. Pomades and Brilliantines IS 9339:1988 xv. Depliatories chemical IS 9636:1988 xvi. Shaving Cream IS 9740:1981 xvii. Cosmetic pencil IS 9832:1981 xviii. Lipstick IS 9875:1990 1.2 All the ingredients that go into formulation of cosmetics shall comply with the provisions prescribed in IS 4707 (Part-I): 1988 and IS 4707 (Part-II): 1993 as well as the product specific requirements. 1.3 The product package shall display a list of critical ingredients in descending order of quantity present. 1.4 The list of such ingredients shall be identified by BIS. The product manufacturer must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act 1974, Water (Prevention and Control of Pollution) Cess Act 1977 and Air (Pollution and Control of Pollution) Act 1981 along with the authorisation if required under Environment (Protection) Act 1986 and rules made thereunder to Bureau of Indian Standards while applying for the ECOMARK. Additionally, provisions of the Drugs and Cosmetics Act, 1940 and rules made thereunder shall also be complied with 1.5 The product package shall be suitably marked that ECOMARK label is applicable only to the content if the product package is not separately covered under the ECOMARK Scheme. 1.6 The material used for product packaging shall be recyclable, reusable or biodegradable. 1.7. The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly. 2. SPECIFIC REQUIREMENTS: **2.1** Product shall be dermatological safe when tested by the method prescribed by IS 4011:1982 2.1.1 Biodegradability of surfactant agents wherever used in cosmetics formulation shall be as per the limit finalised for Ecomark for synthetic detergents. 2.1.2 Heavy metals calculated as Lead (Pb) and Arsenic (As2O3) shall not exceed 20 ppm and 2 ppm, respectively when tested by the respectively methods prescribed in Indian Standards. 2.1.3 STooth Paste/Tooth Powder: For the purpose of formulation of these products, the ingredients listed in IS 6356:1993 and IS 5383:1978 shall only be used. However, tooth paste shall not be fluoridated and presence of fluoride (F) as impurity shall not exceed the limit of 25 ppm when tested by the method prescribed in Indian Standards. 2.1.4 Hair Dyes: Lead based dyes shall not be used. 2.1.5 Nail Polish: Halogenated organic solvents shall not be used. Batteries A. Automotive Lead-Acid Batteries 1. GENERAL REQUIREMENTS: 1.1 The automotive lead-acid batteries shall meet the relevant standards of Bureau of Indian Standards. 1.2 The product manufacturer must produce the consent clearance, as per the provisions of Water (PCP) Act 1974, Water (PCP) Cess Act 1977 and Air (PCP) Act 1981 along with the authorisation if required under

- Environment (Protection) Act 1986 and rules made thereunder.
- 1.3 The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.
- 1.4 The product may be sold along with instructions for proper use so as to maximise the product performance and safe disposal.
- 1.5 The material used for product packaging shall be recyclable or biodegradable.
- 1.6 The manufacturer shall organise the collection pay back system for the used batteries and provide documentary evidence by way of certificate or declaration to this effect while applying for Ecomark.
- 2. PRODUCT SPECIFIC REQUIREMENTS:
- 2.1 Automotive Lead-Acid Batteries:
- 2.1.1 The quantity of lead used, in kg per battery (A), charged battery weight with electrolyte in kg (B) and Ratio A:B shall not exceed the limits given below:

S.No.	Type of Battery	Net lead content in Kg.'A'	Charged battery weight with Electrolyte in Kg.'B'	Ratio A:B
Type o	of Battery in IS 7372 (Pt-1) a	t 20h rate cap	acity	
1.	12 V 32 Ah	6.11	10.5	59
2.	12 V 35 Ah	6.6	11.0	60
3.	12 V 50 Ah	8.36	16.0	53
4.	12 V 60 Ah	9.96	17.5	57
5.	12 V 75 Ah	13.75	22.5	62
6.	12 V 110 Ah	17.17	30.2	57
7.	12 V 120 Ah	19.32	36.0	56
8.	12 V 135 Ah	20.91	36.3	58
9.	12 V 150 Ah	24.8	45.0	56
Туре о	f battery in IS 13568:1992 a	ıt 10h rate ca <sub>l</sub>	oacity	
10.	6 V 4 Ah	0.5	0.85	59
11.	6 V 6 Ah	0.7	1.3	54
12.	6 V 14 Ah	1.51	2.8	64
13.	12 V 2.5 Ah	0.7	1.15	61
14.	12 V 5 Ah	1.44	2.10	69
15.	12 V 6.5 Ah	1.50	2.35	64

- 2.1.2 Lead used in batteries shall be recovered/manufactured through a process complying under the provisions of Water (Prevention & Control of Pollution) Act 1974, Water (Prevention & Control of Pollution) Cess Act 1977 and Air (Prevention & Control of Pollution) Act 1981 along with the authorisation if required under Environment (Protection) Act 1986 and rules made thereunder.
- 2.1.3 The manufacturer of 'Oxide' as well as 'Grid' plates of the battery shall ensure full compliance of the provision under Water (PCP) Act 1974, Water (PCP) Cess Act 1977 and Air (PCP) Act 1981 along with the authorisation if required under Environment (Protection) Act 1986 and rules made thereunder.
- 2.1.4 The product shall contain the following percentage of recycled lead (from post-consumer lead) measured ever a period of 3 months (as a rolling average), where 100 percent is the total amount of lead contained in the batteries manufactured during the quarter:
- i. up to 1 year 25% minimum
- ii. up to 2 years 40% minimum
- iii. up to 3 years 50% minimum

### **B. Dry Cell Batteries**

- 1. GENERAL REQUIREMENTS:
  - 1.1 The dry cell batteries shall meet the relevant standards of Bureau of

	1	Indian Standards.
		1.2 The product manufacturer must produce the consent clearance, as per the provisions of Water (PCP) Act 1974, Water (PCP) Cess Act 1977 and Air (PCP) Act 1981 along with the authorisation if required under Environment (Protection) Act 1986 and rules made thereunder.
		1.3 The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.
		1.4 The product may be sold along with instructions for proper use so as to maximise the product performance and safe disposal.
		1.5 The material used for product packaging shall be recyclable or biodegradable.
		1.6 The manufacturer shall organise the collection pay back system for the used batteries and provide documentary evidence by way of certificate or declaration to this effect to Bureau of Indian Standards while applying for Ecomark.
		2. PRODUCT SPECIFIC REQUIREMENTS:
		2.1 Non-rechargeable dry cell batteries: The amount of mercury in batteries shall not exceed 0.005 per cent by weight.
		2.2 Re-chargeable dry cell batteries: The re-chargeable batteries shall not contain more than 0.005 per cent of mercury.
4	Lubrication	1. GENERAL REQUIREMENTS:
	Oils	1.1. All lubricating/speciality oils shall meet relevant Indian Standards notified by Bureau of Indian Standards (BIS).
		1.2. The product manufacturer must produce the consent clearance as per the provision of Water (Prevention and Control of Pollution) Act, 1974, Water (Prevention and Control of Pollution) Cess Act, 1977 and Air (Prevention and Control of Pollution) Act, 1981 respectively along with the authorisation, if required under Environment (Protection) Act, 1986 and rules made thereunder to Bureau of Indian Standards while applying for the Ecomark.
		1.3. The product must display the list of critical ingredients in descending order of quantity present in per cent by weight, to be decided by BIS.
		1.4. The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly.
		1.5. The material used for product packaging shall be recyclable, reusable or biodegradable.
		1.6. The product package or leaflet accompanying it may display instructions of proper use, storage, transport and recommend disposal guidelines after use and safe handling precautions so as to maximise the product performance and minimise wastage.
		2. PRODUCT SPECIFIC REQUIREMENTS:
		2.1.1 Lubricating Oils (Virgin) Following categories of oil are included:
		a) Lubricants: Vegetable Oil based
		b) Lubricants: Other than Vegetable Oil based
		2.1.2 The product must not have toxic effect on aquatic organisms. EC 50/LC 50 shall not be less than 1.0 mg/litre.
		2.1.3 The base oil, additives and formulated products must have
		per cent biodegradability as mentioned below:
		i. Lubricants (Vegetable Oil based) 90%
		ii. Lubricants (other than Vegetable Oil based) 60%
		The above mentioned per cent biodegradability shall be tested as per OECD test method CEC-L-33-T-82, 21 days.
		2.1.4 The product shall not contain toxic metals such as lead and barium.  Antimony shall not be used in concentration beyond 0.25% when tested as per AAS method. The product must not contain halogenated products such as PCBs, PCTs and PBTs as well as Nitrites.

		2.2 Formulated Lubricants from Re-claimed/Re-refined Oils.
		2.2.1 The product shall contain more than 50% by volume re-refined/recycled products, reclaimed through environmentally compatible re-refining process.
		2.2.2 The product shall meet the product specific requirements as per lubricating oils (Virgin)
5	Soaps and	A. TOILET SOAPS
	Detergents	1. GENERAL REQUIREMENTS:
		<ul> <li>i) All toilet soaps shall meet relevant standards of Bureau of Indian Standards as amended from time to time pertaining to quality, safety and performance.</li> </ul>
		ii) The manufacturers must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 respectively along with the authorisation, if required, under the Environment (Protection) Act, 1986 to BIS while applying for ECOMARK;
		iii) The product must display a list of critical ingredients in descending order of quantity present in per cent by weight. The list of such critical ingredients shall be identified by Bureau of Indian Standards;
		<ul> <li>iv) The product packaging material shall be made from recyclable, reusable or biodegradable material;</li> </ul>
		v) The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly; and
		vi) The product may be accompanied by detailed instructions for proper use so as to maximise product performance and minimise wastage.
		2. PRODUCT SPECIFIC REQUIREMENTS:
		(a) Product formulated or manufactured shall not contain phosphates and synthetic detergents.
		(b) Product shall be dermatologically safe when tested by the methods given in DOC: CHD 025(0236).
		B. DETERGENTS
		1. GENERAL REQUIREMENTS:
		<ul> <li>i) All detergent formulations for house-hold and industrial use shall meet relevant standards of Bureau of Indian Standards (BIS) as amended from time to time, pertaining to quality, safety and performance.</li> </ul>
		ii) The manufacturers must produce the consent clearance from the concerned State Pollution Control Board as per the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 respectively along with the authorization, if required, under the Environment (Protection) Act, 1986 to BIS while applying for ECO Mark;
		iii) The product must display a list of critical ingredients in descending order of quantity present in per cent by weight. The list of such critical ingredients shall be identified by the BIS;
		<ul> <li>iv) The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly;</li> </ul>
		v) The product may be accompanied by detailed instructions for proper use so as to maximise product performance and minimise wastage; and
		vi) The product packaging material shall be made from recyclable, reusable or biodegradable material.
		2. PRODUCT SPECIFIC REQUIREMENTS:
		(a) Product shall not contain phosphates. Any other substitutes may be used which shall be environment friendly.
		(b) The safety on use of the product shall be evaluated as per the methods given in BIS standards as amended from time to time:

		(i) The safety evaluation pertaining to irritant potention according to IS 11601 (Part I)- 1990 and
		(ii) Skin sensitization potential according to IS:11601 (Part II)-1991, and
		(c) Skin sensitisation potential according to IS: 11601 (Part II) - 1991 and Product shall be formulated or manufactured with readily biodegradable surfactants when tested by modified strum test as prescribed in the Indian Standard.
		C. LAUNDRY SOAPS
		1. GENERAL REQUIREMENTS:
		<ul> <li>i) All laundry soaps shall meet relevant standards of Bureau of Indian Standards as amended from time to time pertaining to quality, safety and performance:</li> </ul>
		ii) The manufacturers must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act, 1974, Water (Prevention & Control of Pollution) Cess Act 1977 and Air (Prevention and Control of Pollution) Act, 1981, along with the authorisation, if required, under the Environment (Protection) Act, 1986.
		iii) The product must display a list of critical ingredients
		in descending order of quantity present in per cent by weight. The list of such critical ingredients shall be identified by the Bureau of Indian Standards.
		iv) The material used for product packaging material shall be made from recyclable, reusable or biodegradable material and the parameters evolved under the scheme of labelling environment friendly products on specific subject of packaging shall apply.
		v) The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly.
		vi) The product may be accompanied by detailed instructions for proper use so as to maximise product performance and minimise wastage; and
		vii) Product formulated or manufactured shall not contain phosphates.
		viii) The non-soapy detergent (NSD) if used in the manufacture of laundry soaps shall be readily biodegradable when tested by modified sturm test as prescribed in the Indian Standard.
		ix) The material shall pass the test when evaluated for irritant potential as per the method prescribed in IS 11601 (Part-1): 1986 and skin sensitisation potential when evaluated as per the method prescribed in IS 11601 (Part-2): 1992.
6	Paper	1. GENERAL REQUIREMENTS:
		i) All the paper manufacturers shall meet relevant Indian Standards of Bureau of Indian Standards (BIS) pertaining to quality and performance.
		ii) The product manufacturers must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981, respectively along with the authorisation, if required, under Environment (Protection) Act, 1986 and rules made thereunder to BIS while applying for ECOMARK.
		iii) The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly.
		iv) The material used for product packaging shall be made from recyclable, reusable or biodegradable material and the parameters evolved for the packaging shall also apply.
		2. SPECIFIC REQUIREMENT:
		(i) The paper and paper boards manufactured out of pulp containing not less than 60 percent by weight of pulp made from materials other than bamboo, hard woods, soft woods and Reed.
		(ii) Recycled paper and paper board must be made from 100 percent waste paper.
7	Food Items	A. Edible Oils, Tea and Coffee
	U.	

### 1. GENERAL REQUIREMENTS:

(i) All formulation of edible oils, tea and coffee shall meet relevant standards of Bureau of Indian Standards

pertaining to quality.

- (ii) The product manufacturers must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention & Control of Pollution) Cess Act, 1977, respectively along with the authorisation, if required, under Environment (Protection) Act, 1986 and rules made thereunder while applying for ECOMARK: and the product shall be in accordance with the Prevention of Food Adulteration Act 1954 and the rules made thereunder unless otherwise specified. Additionally, in case of Vanaspati, the manufacturer shall comply with the provisions under Vegetable Oil Products Control Order 1975 issued by the Director of Vanaspati, Ministry of Civil Supplies, Government of India.
- (iii) The product must display a list of critical ingredients in descending order of quantity present (C/o. W/W, or V/V). The list of such Ingredients shall be identified.
- (iv) The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.
- (v) The material used for product packaging shall be recyclable (i.e. which can be reprocessed to manufacture any other useful product) or biodegradable and the parameters evolved under the SLEFP (scheme on labelling of environment-friendly products) on the specific subject of packaging shall apply.

### 2. PRODUCT SPECIFIC REQUIREMENTS:

A. Edible Oils

Category 1: Raw and Refined Edible Vegetable Oil)

- (i) The product shall not contain aflatoxin mor than 5 ppb.
- (ii) The pesticide residues (if any), in the product shall not exceed the limits as prescribed in Prevention of Food Adulteration Act, 1954 and rules made thereunder.
- (iii) The toxic metal concentration (if any) shall not exceed the following limits:

Lead 5.0 ppm

Arsenic 0.5 ppm

Cadmium 1.0 ppm

Mercury 0.25 ppm

- (iv) Antioxidants as permitted under Prevention of Food Adulteration Act, 1954 in specified quantities shall be used.
- (v) Shelf life shall be declared and marked by the manufacturer.

Category 2: Vanaspati (Hydrogenated Vegetable Oil)

- (i) Nickel concentration in the product shall not exceed 0.5 part per million.
- (ii) The product shall be free from obnoxious chemicals (iii) The pesticides residues (if any) in the product shall
- not exceed the limits as prescribed in Prevention of Food Adulteration Act, 1954 and Rules made thereunder.
- (iv) The toxic metal concentration (if any) shall not exceed the following limits.

Lead 5.0 ppm

Arsenic 0.5 ppm

Cadmium 1.0 ppm

Mercury 0.25 ppm

1 1	( ) (1) 10110 1 111 1 1 1 1 1 1 1 1 1 1 1 1 1
	(v) Shelf life shall be declared and marked by the manufacturer.
	(vi) Only permitted antioxidants under Prevention of Food Adulteration Act, 1954 shall be used, if required.
	B. Tea
	<ul><li>(i) Product shall be free from adulterants like spent tea leaves, grit, sand, leaves of other plants.</li></ul>
	<ul><li>(ii) Product shall be free from off-odour and shall have its characteristic flavour.</li></ul>
	(iii) Lead content shall not exceed 6.5 ppm.
	(iv) The product shall be free from any added colouring and no extraneous flavour shall be added, however, for exports this may be allowed as per the provisions of PFA Act, 1954 and rules made thereunder.
	(v) Product shall be free from mould growth.
	(vi) The pesticides residues (if any) shall not exceed the limits as specified in the Prevention of Food Adulteration Act 1954 and Rules made thereunder.
	C. Coffee
	<ul><li>(i) Coffee beans shall be free from infestation due to insect, fungus and rodents.</li></ul>
	(ii) Product shall be free from any extraneous matter like strings, stone, dirt, wood, glass and metallic pieces.
	(iii) Product shall be free from any added colouring, flavouring and also free from rancidity and should have its characteristic flavour.
	(iv) Product shall be free from adulterants like dandelion and other roots, nerons, fige, date, stones and cereals.
	(v) The pesticides residues (if any) in the product shall not exceed the limits as prescribed in Prevention of Food Adulteration Act, 1954 and Rules made thereunder.
8 Packaging	Part I Paper Boards & Plastics excluding Laminates
material / Package	1. GENERAL REQUIREMENTS:
	1.1 All the packaging material/package manufactured shall meet relevant standards of BIS (Bureau of Indian Standards) pertaining to safety, quality and performance wherever applicable.
	1.2 The manufacturer of packaging material/package must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 along with the authorisation, if required, under the Environment (Protection) Act, 1986 and the rules made thereunder to BIS while applying for Ecomark.
	Additionally, the manufacturer shall also comply with the provisions under prevention of Food Adulteration Act 1954 and rules made thereunder, wherever necessary.
	1.3 The packaging material/package may display in brief the criteria based on which the product has been labelled as Environment Friendly.
	1.4 The packaging material/package may be sold along with instruction for proper use and mode of safe disposal so as to maximise product performance and minimise wastage.
	1.5 It shall also be suitably mentioned that ECOMARK label is applicable only to the packaging material/package, if content is not separately covered under Ecomark. It may be stated that the Ecomark is applicable to the product or packaging material or both.
	2. PRODUCT SPECIFIC REQUIREMENTS:
	2.1 Paper & Paper Boards
	2.1.1 The paper and paper boards packaging materials/packages shall be manufactured from the following raw materials:

- i) 100 per cent waste paper or agricultural/industrial wastes;
- ii) A minimum of 60 per cent by mass of pulp made from materials other than bamboo, hardwood, softwood and reed;
- iii) Paper and paper boards used for packaging of food materials shall be manufactured from virgin pulp and shall be free from dioxins. Printed surfaces of the paper shall not come into contact with the food and the maximum amounts of contaminants in paper intended to come into contact with food shall not exceed the limits given in the following table when tested as per the methods given in Appendix-I

Х	Y	Z (in mg/kg of paper)
-	0.5	0.5
-	0.1	0.1
-	3.0	3.0
-	0.3	0.3
0.05	0.05	0.05
2.0	2.0	0.5
	- - - - 0.05	- 0.5 - 0.1 - 3.0 - 0.3 0.05 0.05

- X: Paper intended to come into contact with dry food.
- Y: Paper intended to come into contact with wet food and food with fatty Surface.
- Z: Paper for filtration.
- 2.1.2 The paper and paper boards packaging materials/packages shall conform to the relevant Indian Standards. The paper and paper boards used for the manufacture of packaging materials/packages shall comply with the relevant Indian standards.

### 2.2. PLASTICS (Excluding Laminates)

- 2.2.1 The plastic packaging materials/packages used for packaging of food, pharmaceutical, cosmetics and drinking water shall comply with the relevant Indian standards and shall be manufactured from the plastics which shall comply with relevant Indian Standards.
- 2.2.2 The packaging material used for packaging of non-food, non-pharmaceutical, non-cosmetics and non-drinking water commodities shall be manufactured from recycled plastics which shall, apart from fillers and reinforcing agents, be a minimum of 30% by weight of compatible plastic wastes.

Part - II: Laminates and products thereof

- 1. GENERAL REQUIREMENTS:
- 1.1 Following requirements will be applicable depending upon their relevance to the specific product (to be decided by BIS).
- 1.2 Laminates and products thereof consisting of two or more substrates mentioned below used for manufacture of packaging material/package shall meet the relevant Indian Standards of Bureau of Indian Standards (BIS)
- i. Aluminium
- ii. Jute
- iii. Paper
- iv. Plastic
- 1.3 The manufacturer of packaging material/package must produce the consent clearance as per the provisions of Water (Prevention & Control of Pollution) Act 1974, Water (Prevention & Control of Pollution) Cess Act 1977 and Air (Prevention & Control of Pollution) Act 1981 along with the authorisation, if required under Environment (Protection) Act 1986 while applying for ECOMARK. Additionally, the manufacturer shall also comply with the provisions under Prevention of Food Adulteration Act 1954 and rules made thereunder, wherever necessary.

		1.4 The packaging material/package may display in brief the criteria based on which it has been labelled as environment friendly.
		1.5 The packaging material/package may be sold along with instruction for proper storage, use and mode of safe disposal so as to maximise product performance and minimise wastage.
		1.6 It shall also be suitably mentioned that Eco label is applicable only to the packaging material/package, if content is not separately covered under Ecomark, wherever is applicable. It may be stated that the Ecomark is applicable to the product or packaging material/package or both.
		1.7 Packaging material/package as well as ink used for printing on it shall not contain heavy metals (as Pb) more than 10 ppm when tested as per method given in IS 4006
		(Part - III): 1978 and arsenic content shall not exceed 1.5
		ppm when tested as per method given in IS 1060 (Part-II):1960.
		1.8 The compatibility of the product, process and package including its substrates and adhesives must be ensured by the manufacturer of the end product so that the product (content) quality is maintained within the specified limits till the end of its declared shelf life wherever applicable. The manufacturer shall provide documentary evidence by way of certificate or declaration to this effect while applying for Ecomark.
		2. PRODUCT SPECIFIC REQUIREMENTS:
		2.1 Laminates and products thereof shall be recyclable or reusable for non-food purposes which shall be demonstrated to BIS with supporting document/certificate.
		2.2 The laminates and products thereof used for packaging of food, pharmaceuticals, cosmetics and drinking water shall be manufactured from the raw material as specified in the relevant Indian Standard for this purpose.
		2.3 The laminates and products thereof shall not contain any residual volatile organic compounds when tested by gas liquid chromatography method.
		2.4 There shall not be any obnoxious odour in laminates.
9	Electric /	GENERAL REQUIREMENTS
	Electronic Goods	1.1 All products manufactured shall meet the requirements of following Indian Standards of BIS pertaining to quality, safety and performance:
		i. Tubular Flourescent Lamps IS 2418(Pt- 1977
		ii. Electrical Iron IS 366:1985
		iii. Steam Iron IS 6290:1986
		iv. Immersion water heater IS 368:1983
		V. Electric radiator IS 369:1983
		Vi. Electric Stoves IS 2994:1986
		<ul><li>Vii. Ceiling fans including regulators IS 374:1979</li><li>Viii. Pedestal fans IS 1169:1967</li></ul>
		ix. Table fans IS 555:1979
		x. Exhaust fans IS 2312:1967
		xi. Desert coolers IS 3315:1974
		xii. Geysers IS 2082:1985
		Xiii. Electric toasters IS 1287:1986
		xiv. Refrigerators IS 1476:1979
		xv. Colour Televisions IS 10662:1992
		XVI. Black & White Televisions IS 4547:1992
		xvii. Food Mixers IS 4250:1980
		xviii. Instantaneous water heaters IS 8978:1985
1	1	

xix. Electronic fan regulators IS 11037:1984

XX. Manually operated voltage regulator for domestic use IS 8447:1989

XXI. Automatic line voltage corrector IS 8448:1989

XXIII. Servo motor operated line voltage corrector

IS 9815:1989

xxiv. Hot plates IS 365:1983

XXV. Single phase electric motors IS 996:1979

- 1.2 The product manufacturer must produce the consent clearance, as per the provisions of Water (Prevention and Control of Pollution) Act 1974, Water (Prevention and Control of Pollution) Cess Act 1977 and Air (Pollution and Control of Pollution) Act 1981 along with the authorisation if required under Environment (Protection) Act 1986 and rules made there under to Bureau of Indian Standards while applying for the ECOMARK.
- 1.3 The product must display a list of critical components/cautionary notes, as applicable, which shall be decided by BIS.
- 1.4 The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.
- 1.5 The product may be sold along with instructions for proper use so as to maximise product performance, minimise wastage and method of safe disposal of used product.
- 1.6 The material used for product packaging shall be recyclable or biodegradable.
- 1.7 Domestic electrical/electronic appliances shall conform to the noise levels as notified under the Environment (Protection) Act, 1986 from time to time for individual appliance, if any.
- 2. SPECIFIC REQUIREMENTS:
- **2.1** Television (Colour and Black and White)
- 2.1.1 CFC and other aromatic-halogenated hydrocarbons shall not be used for cleaning purpose during manufacturing assembly.
- 2.1.2 The electromagnetic radiation from colour television shall not exceed the limit specified in IS 6842:1977 when tested as prescribed in IS 4546:1983.
- 2.1.3 The rated maximum power consumption in watts for colour and black & white television receivers shall be as specified below:
  - i. CTV 75 W for screen size upto and including 53 cms; and 100 W for screen size above 53cm.
  - ii. B&W TV -50 W for screen size above 36 cm but below 51 cm; and 75 W for screen size of 51 cm and above"

### 2.2 Energy Efficiency/Reduced Power Consumption for Electrical Appliances

2.2.1 The product shall have atleast 5 percent improvement in energy efficiency or 5 percent reduction in power consumption over and above, the limit prescribed in the relevant Indian Standards. Alternatively, equipment using solar energy shall be eligible for ECOMARK under this clause. In case where both energy efficiency and power consumption have been specified in

the Indian Standards, the Ecomark criteria shall be based on

improved energy efficiency. However, in cases where product of energy efficiency and power factor has been specified, 5 percent improvement in the specified limit shall be the criteria for Ecomark.

- **2.3** Electric type fan regulators, Manual operated voltage stabilizers, Automatic voltage stabilizers and Servo Motor operated voltage stabilizers.
- **2.3.1** The product shall have at least 96 percent energy efficiency. In case of electronic type fan regulators, compliance with the relevant Indian Standard together with compliance with the General Requirements prescribed under clause 1, are adequate for considering them under ECOMARK.

	1	2.4 Tubular Fluorescent Lamps
		2.4.1 Slim line fluorescent tubes with 36 watts (as against 40 watts for 38 mm dia fluorescent tubes) and 18 watts (as against 20 watts for 38 dia fluorescent tubes) rated power consumption shall be considered for Ecomark.
10	Food	1. GENERAL REQUIREMENTS:
	Additives	<ul> <li>1.1 All products of Beverages, Baby Foods and Processed Fruit and vegetable products shall meet the relevant standards for BIS pertaining to quality</li> </ul>
		1.2 The product manufacturer must produce the consent clearance, as per the provisions of Water (Prevention and Control of Pollution) Act 1974, Water (Prevention and Control of Pollution) Cess Act 1977 and Air (Pollution and Control of Pollution) Act 1981 along with the authorisation if required under Environment (Protection) Act 1986 and rules made thereunder to Bureau of Indian Standards while applying for the ECOMARK and the product shall also be in accordance with the Prevention of Food Adulteration Act 1954 and the rules made thereunder.
		1.3 The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly.
		1.4 The material used for product packaging shall be recyclable or biodegradable
		1.5 The date of manufacture and date of expiry shall be declared on the product package by the manufacturer.
		1.6 The product must be microbiologically safe when tested as per IS:5403 and IS:5887 (Part V) and should be free from bacterial and fungal toxins.
		1.7 The pesticide residues (if any) in the product shall not exceed the limit as prescribed in PFA Act, 1954 and the rules made thereunder.
		1.8 The product package or leaflet accompanying it may display instructions of proper use and storage so as to maximise the product performance, safety and minimise
		wastage.
		2. PRODUCT SPECIFIC REQUIREMENTS:
		2.1 Beverages:
		IS 2346:1992 Carbonated beverages
		IS 13019:1991 Non alcoholic beverages bases (concentrates) for domestic use
		2.1.1 Arsenic content of the product shall not exceed 0.1 ppm.
		2.1.2 The material used inside the metal cap of the product shall conform with the relevant Indian Standards of food grade plastics. Caps and closures shall not be treated as labels.
		2.1.3 The percentage of fruit juice pulp, if any added shall be mentioned on the product package.
		2.1.4 No synthetic colour and artificial sweetener shall be added or used in the product manufacturing.
		2.2 Infant Foods:
		IS 1547:1985 Infant milk food
		IS 1656:1985 Milk cereal based weaning food
		IS 11156:1985 Infant Formulae
		IS 13471:1992 Low fat infant formula
		IS 6387:1987 Vegetable protein infant food with milk
		<ul><li>2.2.1 Arsenic content of the product shall not exceed 0.1 ppm</li><li>2.2.2 The material used inside the metal cap of the product shall conform with the relevant Indian Standards of food grade plastics. Caps</li></ul>

and closures shall not be treated as labels.

- 2.2.3 The percentage of fruit juice pulp, if any added shall be mentioned on the product package.
- 2.2.4 No synthetic colour and artificial sweetener shall be added or used in the product manufacturing.
- 2.2.5 Product shall be free from Aflatoxins.
- 2.3 Processed Fruits and Vegetable Products excluding beverages:
- (a) Canned fruits and vegetables:
- IS 2867:1964 Canned Mangoes
- IS 2868:1964 Canned Pineapples
- IS 2869:1964 Canned Orange Segments
- IS 3445:1965 Canned Peas
- IS 3246:1965 Canned Okra (Bhindi)
- IS 3247:1976 Canned Bitter Gourd (Karela)
- IS 3248:1992 Canned Tomatoes
- IS 3500:1966 Mango Chutney
- IS 3501:1966 Pickles
- IS 8786:1978 Canned Okra (Bhindi) in Tomato Sauce
- IS 9789:1981 Canned Apricot
- IS 9790:1981 Canned French Beans
- IS 9791:1981 Canned Tinda
- IS 9811:1981 Canned Spinach
- IS 9822:1981 Canned Parwal
- IS 9823:1981 Canned Potatoes
- IS 10252:1982 Canned Carrot in Brine
- IS 10253:1982 Canned Papaya in Syrup
- IS 13474:1993 Canned Green Pepper in Brine
- (b) Dehrydrated fruits and vegetables
- IS 4452:1967 Dehydrated Onion
- IS 4624:1987 Dehydrated Peas
- IS 4625:1968 Dehydrated Carrots
- IS 4626:1978 Dehydrated Potatoes
- IS 4627:1968 Dehydrated Cabbage
- IS 4628:1978 Dehydrated Okra (Bhindi)
- IS 5452:1992 Dehydrated Garlic
- IS 9486:1980 Dehydrated Green Pepper
- (c) Jams, Jellies and marmalades
- IS 5861:1992 Jams, Jellies and Marmalades
- (d) Juices and concentrates
- IS 3547:1976 Mango Nectar
- IS 3880:1976 Canned Mango Pulp
- IS 3881:1966 Tomato Juice
- IS 3882:1966 Tomato Ketchup
- IS 3883:1993 Tomato Puree
- IS 3884:1993 Tomato Paste
- IS 4935:1968 Synthetic Syrups
- IS 4936:1968 Fruit Squashes
- IS 5800:1970 Orange Juice
- IS 7732:1975 Apple Juice

	1	IS 8713:1978 Mango Juice
		2.3.1 The limit of heavy metal contaminants in the products shall be in accordance with Indian Standards or as per CODEX standards and whichever is lower will apply. The list of such contaminants shall be identified by BIS.
11	Wood	1. GENERAL REQUIREMENTS:
	Substitutes	1.1 Products manufactured shall meet relevant Indian Standards of BIS (Bureau of Indian Standards) pertaining to safety, quality and performance. The product manufacturer must produce the consent clearance, as per the provisions of Water (Prevention and Control of Pollution) Act 1974, Water (Prevention and Control of Pollution) Cess Act 1977 and Air (Pollution and Control of Pollution) Act 1981, along with the authorisation if required under Environment (Protection) Act 1986 and rules made thereunder while applying for the ECOMARK appropriate with enforced rules and regulations of the Forest Department.
		1.2 The product or product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly.
		1.3 The material used for product packaging shall be recyclable, reusable or biodegradable.
		<ul><li>2. SPECIFIC REQUIREMENTS:</li><li>2.1 Substitutes for fuel-wood:</li></ul>
		2.1 Substitutes for fuer-wood: 2.1.1 Briquettes shall be made from agricultural and wood residues (like saw dust)
		and domestic wastes (like garbage) without synthetic binders, for industrial and domestic use. Such briquettes shall not be manufactured from any wastes material which contain any hazardous constituents as specified under Hazardous Wastes (Management and Handling) Rules, 1989.
		2.2 Substitutes for Wood Building Material
		2.2.1 Building boards generally used as partitioning, panelling, cladding and false-ceiling shall be made from agricultural or industrial wastes (such as Phospho-gypsum, red mud, baggase, cotton stalk, rice-husk, coir fibre, sisal fibre or wood residues etc., or wood from sources other than natural forests or environment friendly plastics as notified separately.
		2.2.2 Door and window frames and shutters used in buildings shall be made from agricultural or industrial wastes or wood residues or wood from sources, other than natural forests or ferrocement or building boards specified in 2(ii)(a) above or environment friendly plastic as notified separately, or frames made from enforced cement concrete.
		2.3 Substitutes for Wood in Furniture
		2.3.1 The furniture (table, chairs and Stool etc.) shall be made from agricultural or industrial wastes or wood residues or wood from sources other than natural forests or building boards specified in 2(ii)(a) above or environment friendly plastics as notified separately.
12	Aerosol	1. GENERAL REQUIREMENTS:
	Propellants	1.1 Propellants used in aerosol products shall meet the relevant Standards of BIS (Bureau of Indian Standards) pertaining to safety, quality, and performance. The manufacturer must produce the consent clearance as per the provisions of water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981 along with the authorisation, if required under environment (Protection) Act 1986 and the rules made thereunder while applying for Ecomark.  1.2 The product package shall be suitably marked that the Ecomark label is
		applicable only to the propellants used in Aerosol sprays, if the product package is not separately covered under the Ecomark Scheme.  1.3 Product package or leaflet accompanying it may display instructions of proper
		use, storage and disposal so as to maximise the product performance, safety and minimise wastage.
		<ul><li>1.4 The material used for product packaging shall be made from recyclable or biodegradable material.</li><li>2. SPECIFIC REQUIREMENTS:</li></ul>
<u> </u>		2. of Dolf to NEQUINEMENTO.

		2.1 The aerosol propellants shall not contain any Ozone Depleting Substances (ODS) relevant to Aerosol industry as identified under Montreal Protocol.
13	Plastic	1. GENERAL REQUIREMENTS:
	Products	1.1 All products of plastics shall meet relevant standards of Bureau of Indian Standards pertaining to quality, safety, and performance. The product manufacturer must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 along with the authorisation if required under Environment (Protection) Act, 1986 and the rules made thereunder while applying for the ECOMARK. The manufacturers of Plastic wares shall produce documentary evidence with respect to the compliance of regulation under Prevention of Food Adulteration Act, 1954 and Drugs and Cosmetic Act, 1940 and rules made thereunder, wherever necessary.
		1.2 The product must display a list of critical ingredients in descending order of quantity present expressed as per cent of the total. The list of such ingredients shall be identified by Bureau of Indian Standards.
		1.3 The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.
		1.4 The material used for product packaging shall be recyclable or biodegradable. It shall also be suitably mentioned that Ecomark label is applicable only to the packaging material/package if content is not separately covered under Ecomark. It may be stated that the Ecomark is applicable to the product or packaging material or both.
		2. SPECIFIC REQUIREMENTS:
		2.1 Food, Pharmaceutical and Drinking Water Grade Plastic Products
		2.1.1 For the manufacture of these items one or more of the virgin materials covered in following Indian Standards shall be used:
		i. IS 10142 : 1982
		ii. IS 10151 : 1982
		iii. IS 10910 : 1984
		iv. IS 11434 : 1985
		v. IS 11704 : 1986
		vi. IS 12247 : 1988
		vii. IS 12252 : 1987
		2.2 Recycled Plastic Products:
		This sub-category includes all plastic products as further defined in the following categories:
		i. Horticultural supplies.
		ii. Produce containers.
		iii. Office supplies.
		iv. Non-food containers.
		V. Recreational equipment and furniture.
		VI. Construction materials.
		Horticultural supplies include all implements, containers and support structures used in gardening activities such as flower pots, garden stakes and berry trays.
		Product containers include containers for agricultural produce such as eggs, fruits and vegetables.
		Office supplies include all implements, containers and support structures for use in offices such as presentation folders, file folders and binder covers.
		Non-food containers, not for holding the contents, include all containers for non-food products such as detergent bottles, pallets, and reusable packaging containers.
		Recreational equipment and furniture include all implements and support structures designed for the recreational market such as play ground equipment and patio tables.
		Construction materials include all materials used in the construction of structures

		whether stationary or transportable, such as lumber, fencing or shingles.  2.2.1 The plastic products identified in sub-categories from 2.2(i) to 2.2 (v) shall apart from fillers and reinforcing agents, be made from the minimum 90 per cent, by weigh, of compatible plastic wastes.  2.2.2 The plastic products identified in sub-category 2.2(vi) shall apart from fillers and reinforcing agents, be made from the minimum 60 per cent, by weight, or compatible plastic wastes.
14	Textiles	1. GENERAL REQUIREMENTS:  1.1 All the textile products manufactured shall meet relevant standards of Bureau of Indian Standards. The product manufacturer must produce the consent clearance as per the provisions of Water (Prevention and Control of Pollution) Act 1974 and Air (Prevention and Control of Pollution) Act 1981, Water (Prevention and Control of Pollution) Cess Act, 1977 respectively, along with the authorisation, if required under Environment (Protection) Act, 1986 and the rules made thereunder while applying for Ecomark. Additionally, the manufacturer shall produce documentary evidence on compliance of the provisions related to noise level and occupational health under the provisions of Factories Act, 1948

and Rules made thereunder.

- 1.2 The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.
- 1.3 The material used for product packaging shall be reusable or made from recyclable or biodegradable materials.
- **1.4** Fatty alcohol based non-ionics as emulsifier should be sued wherever required.
- 1.5 Polyhalogenated based phenolic fire retardants shall not be used.

# 2. SPECIFIC REQUIREMENTS:

A.	COTTON, WOOL, MAN-MADE FIBRE & BLENDS							
S. No.	Parameters*	Max. limit, mg/kg (ppm)						
•		Baby	Close to Skin	Outer				
		Clothing		Fabrics				
1	2	3	4	5				
1)	Free & Releasable Formaldehyde	20	75	300				
2)	Extractable artificial sweat/salvia Heavy Metals Mercury	0.1	0.1	0.1				
3)	Chromium III	0.1	0.1	0.1				
4)	Chromium VI	Nil	Nil Below detectable limit	Nil				
5)	Sum Parameters (as lead)	10.0	10.0	10.0				
6)	Pentachlorophenol (PCP)	0.5	0.5 (Detectable limit using GC.MS)	0.5				
7)	Volatile Hydrocarbons (non- halogens)	150	150	150				
8)	Volatile Halogenated Organics	200	200	200				
9)	Pesticides (Sum Parameter)	1.0	1.0	1.0				
10)	Banned Pesticides	Nil	Nil	Nil				
			(Below detectable limit)					
11)	pH of aqueous extract	4.0-7.5	4.0-7.5	4.0-7.5				
12)	Coupled Amines released from Azo-dyes (Sum parameters) ***	50	50 (Detectable limit using GC-MS)	50				

B.	JUTE AND JUTE PRODUCTS			
S. No.	Parameters *	Max. limit, mg/kg.		
		Home Textiles & Clothing	Hessians & Sockings	
1	2	3	4	
1)	Free and Releasable Formaldehyde			
	Close to skin	75	NA	
	Outer Fabrics	300	NA	
2)	Extractable artificial sweat/salvia	·		
	Heavy Metals			
	Mercury	0.1	NA	
	Chromium III	0.1	NA	
	Chromium VI	Nil (Below detectable limit)	NA	
	Sum parameters(as lead)	10.0	NA	
3)	Non-halogenated Hydrocarbon	NA	3%	
4)	Fatty esters based oil	2%	NA	
5)	Pesticides (Sum Parameter)**	1.0	1.0	
	Banned Pesticides	Nil (Below detectable limit)	Nil	
6)	PH of aqueous extract	6.0-7.0	6.0-7.0	
7)	Coupled amines released from Azo-dyes (Sum parameters)***	50	50 (Detectable limit using GC-MS)	

C.	SILK AND SILK PRODUCTS					
S.	Parameters*	Max. limit, mg/kg (ppm)				
		Baby Clothing	Close to Skin	Outer Fabrics		
1	2	3	4	5		
1)	Free & Releasable Formaldehyde	20	75	300		
2)	Extractable artificial sweat/salvia Heavy Metals	0.1	0.1	0.1		
	Chromium III	0.1	0.1	0.1		
	Chromium VI	Nil	Nil Below detectable	Nil		
	Sum Parameters (as lead)	10.0	10.0	10.0		
3)	Pentachlorophenol (PCP)	0.5	0.5 (Detectable limit	0.5		
4)	Volatile Hydrocarbons (non-halogens)	150	150	150		
5)	Pesticides (Sum Parameter) **	1.0	1.0	1.0		
	Banned Pesticides	Nil	Nil (Below detectable	Nil		
6)	pH of aqueous extract from Azo-dyes (Sum parameters) ***	4.0-7.5	4.0-7.5 (Detectable limit using GC-MS)	4.0-7.5		

# 15 Fire Extinguishers

# 1. GENERAL REQUIREMENTS:

1.1 Any fire extinguisher having BIS standard mark qualifies for consideration of Ecomark. Following are the BIS Standards for portable and mobile fire extinguishers:

IS 940:1989	Portable Fire Extinguishers Water Type (Gas Cartridge)				
IS 2171:1985	Portable Fire Extinguishers Dry Powder Type (Cartridge)				
IS 2878:1986	Fire Extinguishers Carbon Dioxide Type (Portable and Trolly - Mounted)				
IS 6234:1986	Portable Fire Extinguishers Water Type (Stored Pressure)				
IS 10204:1982	Portable Fire Extinguishers Mechanical Foam Type				
IS 10658:1983	ligher Capacity Dry Powder Fire Extinguishers (Trolly-Mounted				
IS 11833:1986	Ory Powder Fire Extinguishers for Metal Fires				
IS 13385:1992	Specifications for Fire Extinguishers 50 litre Wheel-Mounted Water type (Gas Cartridge)				
IS 13386:1992	Specifications for Fire Extinguishers 50 litre Mechanical Foam Type				
IS 13849:1993	Portable Fire Extinguishers Dry Powder Type (Constant Pressure)				

The product manufacturer must produce the consent clearance as

per provision of the Water (Prevention & Control of Pollution) Act,
1974, Water (Prevention & Control of Pollution) Cess Act, 1977 and Air
(Prevetnion & Control of Pollution) Act, 1981, respectively, along with
authorisation if required under Environment (Protection) Act, 1986, and
the rules made thereunder while applying for Ecomark.
1.3. The product may display in brief the criteria based on which the

- 1.3 The product may display in brief the criteria based on which the product has been awarded Ecomark.
- 1.4 The product may be sold along with instructions for proper use so as to maximise product performance with statutory warning, if any, minimise waste and method of safe disposal.
- 1.5 The material used for product packaging (excluding refills) shall be recyclable, reusable or biodegradable.
- 1.6 The product must display a list of critical ingredients in descending order of quantity present in percent by weight. The list of such critical ingredients shall be identified by the Bureau of Indian Standards.

# 2. SPECIFIC REQUIREMENTS:

- 2.1 The fire extinguishers shall not contain any Ozone Depleting Substance (ODS) relevant to fire extinguishers industry as identified under the Montreal Protocol.
- 2.2 Gas-based extinguishing media once discharged in the atmosphere should not have atmospheric lifetime of more than a year.
- 2.3 Chemicals used should not have global warming potential.
- 2.4 The metallic body and other metal parts of the fire extinguishers shall be free of lead or lead alloys.
- 2.5 The coatings used for the metallic part shall not be formulated with mercury and mercury compounds or be tinted

		with pigments of lead, cadmium, chromium VI and their oxides.
		Excluded are natural impurities or impurities entailed by the production
		process up-to the amount of 0.1 percent by weight which are contained
		in the raw material.
16	Finished	1. GENERAL REQUIREMENTS:
	Leather	1.1 The manufacturers shall produce consent clearance as per the provisions of the Water (Prevention and Control of Pollution) Act, 1974, and the Air (Prevention and Control of Pollution) Act, 1981, along with the authorisation for Hazardous Waste Management, if required under the Environment (Protection) Act, 1986, for seeking Ecomark certification.
		1.2 The product packaging shall display in brief the criteria based on which the product has been labelled environment friendly.
		The material used for product packaging shall be recyclable or reusable or biodegradable.

	S.No.	Parameters*	Limits	Test method, As per		
	1.	PH of aqueous extract of leather	Not less than 3.5 & if less than 3.5, the pH difference on dilution by a factor of 10 differential number, should not be more than 0.6			
	2.	Formalehyde,mg/kg, Max	200	**		
	3.	Pentachlorophenol (PCP), mg/kg, Max	5#	IS 14575:1998		
	4.	Aryl amines released from Azo-dyes (Sum parameters)***, mg/kg, Max	30#	**		
	5.	Hexavalent Chromium, mg/kg, Max	3	**		
17 Coir & Coir Products	1.1 Prorelevant (BIS): Coir IS 898 ii. IS 93 Fibres (iii. IS 93 Part 4 M	1. <b>GENERAL REQUIREMENTS:</b> 1.1 Product manufactures shall meet the requirements specified in the relevant Indian Standards formulated by Bureau of Indian Standards				

- Part 2 Corridor mats
- Part 3 Door mats Creel, bit and fibre Part 4

Door mats — Rod

Part 5 Gymnasia mats Part 6

Loop mats

Part 7 Mesh mats

Part 8 Rope mats (Lover's knot mats)

Part 9 Sinnet mats

ii. IS 12503 (Parts 1 to 6) - Coir - mattings, mourzouks and carpets  $\,$ 

Part 1 General requirements Part 2

Coir mattings

Part 3 Ribbed coir mattings

Part 4 Coir mourzouks Part 5

Coir carpets

Part 6 Coir mattings for cricket pitches

- iii. IS 14596 Coir products- 2- Ply coir yarns spun by manual operation- Specification
- iv. IS 15340 Coir felt- Specification
- v. IS 15869 Textiles Open Weave Coir Bhoovastra Specification
- vi. IS 1410 Textiles Coir Ropes Specification (Third Revision)
- vii. IS 16338 Fibre Ropes Coir Twine for Trailing Hop Vines Specification

# c) Coir Pith (Indian standard on the subject is under development)

# d) Rubberized coir:

- i. IS 8391 Specification for rubberized coir sheets for cushioning (First Revision)
- ii. IS 11060 Specification for moulded rubberized coir cushioning

### e) Coir composite boards:

- i. IS 14842 Coir veneer board for general purposes Specification
- ii. IS 15491 Medium density coir boards for general purposes Specification
- iii. IS 15877 Coir faced block boards Specification
- iv. IS 15878 Coir hardboard for general purposes Specification
- 1.2 The product manufacturers must produce the consent clearance, as per the provisions of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 and the authorization(s), if required under the rules notified under the Environment (Protection) Act, 1986 as applicable, and the rules made there under, to BIS while applying for Ecomark.
- 1.3 The product(s) or product packaging(s) may display in brief the criteria based on which the products has/have been labelled environment friendly.

1.4 The material used for product packaging(s) shall be recyclable, reusable, or biodegradable.

# 2. SPECIFIC REQUIREMENTS:

Not Applicable / Required Not Applicable / Required

products only)
30.0
(For coloured products only)

Banned aryl amines from azo dyes, (ppm) (Max)

S. No.	Parameters	Coir Fibre	Coir products	Coir Pith	Rubberised coir	Coir Composite Boards	Test Methods
1.	Residual pesticides (Sum parameter) (ppm) (Max)	1.0	1.0	1.0	1.0	Not Applicable / Required.	IS 15651
2.	pH of aqueous extract	6-7	6-7	6-7	6-7	6-7	IS 8391
3.	Total Chloride content (%) as Cl, Max	Not Applicable / Required.	Not Applicable/ Required.	Not Applicable/ Required.	Not Applicable / Required.	0.3	IS 4202
4.	Total Sulphate content (%) as SO <sub>4</sub> , Max	Not Applicable/ Required	Not Applicable/ Required	Not Applicable / Required	Not Applicable / Required	0.2	IS 4203
5.	Free and Releasable Formaldehyde (max)	Not Applicable / Required	300 ppm (For coloured	Not Applicable / Required	Not Applicable / Required		IS 14563 (Part-1 & 2) for Coir Products
			products only) (Total of free and released formaldehyde)			i) 80 mg/kg (Free Formaldchyde) ii) 0.124 mg/m <sup>3</sup>	i) IS13745 for Coir Composite Boards ii) IS/ISO 12460
						(Releasable Formaldehyde)	1 for Coir Composite Boards
6.	Extractable heavy metals by artificial acidic sweat (ppm) (Max)	Not Applicable / Required		Not Applicable/ Required.	Not Applicable / Required.	Not Applicable / Required.	18 15651
	a. Antimony (Sb)		10				
	b. Arsenic (As)		1.0				
	c. Lead (Pb)		1.0				
	d. Cadmium (Cd)		0.1				
	e. Mercury (Hg)		0.1				
	f. Chromium Total (Cr)		2.0				
	g. Cobalt (Co)		4.0				
	h. Copper (Cu)		50.0				
	i. Nickel (Ni)		4,0 (For coloured products only)				
7.	Pentachlorophenols (PCP), (ppm) (Max)	Not Applicable / Required	0.5 (For coloured products only)	Not Applicable / Required	Not Applicable / Required	Not Applicable / Required	IS 15651

Not Applicable / Required Not Applicable / Required

Not Applicable / Required Not Applicable / Required

Not Applicable / Required

IS 15570