

## Ecomark Criteria for Electric/ Electronic Goods

### General Requirements:

All products manufactured shall meet the requirements of following Indian Standards of BIS pertaining to quality, safety and performance:

S. No.	Items	IS Code No.
1.	Tubular Fluorescent Lamps	IS 2418(Part-1):1977
2.	Electrical Iron	IS 366:1991
3.	Steam Iron	IS 6290:1986
4.	Immersion water heater	IS 368:1983
5.	Electric radiator	IS 369:1983
6.	Electric Stoves	IS 2994:1986
7.	Ceiling fans including regulators	IS 374:1979
8.	Pedestal fans	IS 1169:1967
9.	Table fans	IS 555:1979
10.	Exhaust fans	IS 2312:1967
11.	Desert coolers	IS 3315:1974
12.	Geysers	IS 2082:1985
13.	Electric toasters	IS 1287:1993
14.	Refrigerators	IS 1476:1979
15.	Colour Televisions	IS 10662:1992
16.	Black & White Televisions	IS 4547:1992
17.	Food Mixers	IS 4250:1980
18.	Instantaneous water heaters	IS 8978:1992
19.	Electronic fan regulators	IS 11037:1984
20.	Manually operated voltage regulator for domestic use	IS 8447:1989
21.	Automatic line voltage corrector	IS 8448:1989
22.	Servo motor operated line voltage corrector	IS 9815:1989
23.	Hot plates	IS 365:1983
24.	Single-phase A.C. industrial motors for general purpose	IS 996:2009

- 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.
- The product must display a list of critical components/cautionary notes, as applicable, which shall be decided by BIS.
- The product packaging may display in brief the criteria based on which the product has been labelled environment friendly.
- 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.
- The material used for product packaging shall be recyclable or biodegradable.
- 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.

#### **Product Specific Requirements:**

- **Television (Colour and Black and White)**

CFC and other aromatic-halogenated hydrocarbons shall not be used for cleaning purpose during manufacturing assembly.

The electro-magnetic radiation from colour television shall not exceed the limit specified in IS 6842:1977 when tested as prescribed in IS 4546:1983. The rated maximum power consumption in watts for colour and black & white television receivers shall be as specified below:

CTV – 75 W for screen size upto and including 53 cms; and 100 W for screen size above 53cm.

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"

- **Energy Efficiency/Reduced Power Consumption for Electrical Appliances (refer appendix-1)**

The product shall have at least 5% improvement in energy efficiency or 5% 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% improvement in the specified limit shall be the criteria for Ecomark.

In case of refrigerators, the refrigerants and foam blowing agents shall not contain any Ozone Depleting Substances (ODS) relevant to refrigeration industry as identified under Montreal Protocol.

- **Electric type fan regulators, Manual operated voltage stabilizers, Automatic voltage stabilizers and Servo Motor operated voltage stabilizers.**

The product shall have at least 96% 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.

**Note:** The respective sectional committee of BIS may be requested to take up the issue for prescribing requirements for energy efficiency or power consumption or any other requirement with a view to ensure energy conservation in usage of this item.

- **Tubular Fluorescent Lamps**

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.

#### **APPENDIX - I**

##### **List of Electrical Appliances Covered Under Clause-2.2**

1	Electric Iron
2	Steam Iron
3	Immersion Rod
4	Electric Radiator
5	Electric Stoves
6	Ceiling Fans
7	Pedestal Fans
8	Table Fans

9	Exhaust Fan
10	Desert coolers
11	Geysers
12	Electric Toasters
13	Refrigerators
14	Electric Food Mixers
15	Instantaneous water heater
16	Hot plates
17	Single phase electric motors

The following BIS standards have been amended incorporating the above Ecomark requirements:

Indian Standards	Year of Incorporation	Descriptions
IS 996:2009	2009	Single-phase A.C. industrial motors for general purpose
IS 1476 : Part 1 2000, Reaffirmed Year 2010	1996	Performance of Household Refrigerating Appliance - Refrigerators with or Without Low Temperature Compartment - Part 1 : Energy Consumption and Performance
IS 3315:1994 Reaffirmed Year 2009	2004	Evaporative Air Coolers (Desert coolers)
IS 4547:1992, Reaffirmed Year 2007	1996	Receivers for Monochrome Television Broadcast Transmissions
IS 8447:1989, Reaffirmed Year 2008	1994	Manually operated voltage regulators for domestic use
IS 8448:1989, Reaffirmed Year 2008	1994	Automotive lined voltage regulator
IS 10662:1992 Reaffirmed Year 2007	1997	Receivers for colour television broadcast transmission

**The incorporation of the Ecomark requirements, in the following BIS standards, are under process:**

<b>Indian Standards</b>	<b>Year of Incorporation</b>	<b>Descriptions</b>
IS 365:1983 Reaffirmed Year 2008	-	Electric Hot plates
IS 366:1991 Reaffirmed Year 2009	-	Electric irons
IS 368:2014	-	Electric Immersion Water Heaters
IS 369:1992 Reaffirmed Year 2010	-	Electric radiator
IS 374:1979 Reaffirmed Year 2007	-	Ceiling fans including regulators
IS 555:1979 Reaffirmed Year 2010	-	Table fans
IS 1169:1967 Reaffirmed Year 2010	-	Electric pedestal type fans and regulators
IS 1287:1993 Reaffirmed Year 2009	-	Electric toasters
IS 2082:1993 Reaffirmed Year 2010	-	Stationary storage type electric water heaters
IS 2312:1967 Reaffirmed Year 2010	-	Propeller type ac ventilating fans
IS 2418 : Part 1 1977 Reaffirmed Year 2010	-	Tubular Fluorescent Lamps for General Lighting Service - Part I : Requirements and Tests
IS 2994:1992 Reaffirmed Year 2009	-	Electric stoves
IS 4250:1980 Reaffirmed Year 2009	-	Domestic Electric Food-Mixers (Liquidizes and Grinders)
IS 6290:1986 Reaffirmed Year 2011	-	Steam iron
IS 8978:1992 Reaffirmed Year 2009	-	Electric instantaneous water heaters
IS 9815 : Part 1 1994 Reaffirmed Year 2009	-	Servo-motor operated automatic line voltage correctors: Part 1 Correctors for single phase applications
IS 11037:1984 Reaffirmed Year 2010	-	Electronic type fan regulators

**Source:** [http://cpcb.nic.in/EnvironmentalPlanning/Eco-label/electrical\\_goods.pdf](http://cpcb.nic.in/EnvironmentalPlanning/Eco-label/electrical_goods.pdf)