Ecomark Criteria for Batteries

Automotive Lead-Acid Batteries
(The Gazette of India, Extraordinary, Part II-Section 3(i), No. 364, Sept. 7, 1995)

General Requirements:

- The automotive lead-acid batteries shall meet the relevant standards of Bureau of Indian Standards.
- 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 there under.
- 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 the product performance and safe disposal.
- The material used for product packaging shall be recyclable or biodegradable.
- 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.

Product Specific Requirements:

- 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
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
Type of Battery in IS 7372 (Pt-1) at 20h rate capacity				
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
Type of battery in IS 13568:1992 at 10h rate capacity				
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

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 there under.

Note: Manufacturer of the battery shall obtain documentary evidence from the lead manufacturer to this effect such as consent clearance from Pollution Control Boards and provide the same to BIS while applying for Ecomark.

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 there under.

Note: Manufacturer of the battery shall obtain documentary evidence from the "Oxide" and 'Grid' manufacturers to this effect such as consent clearance from Pollution Control Board and provide the same to BIS while applying for Ecomark. 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% is the total amount of lead contained in the batteries manufactured during the quarter

1. up to 1 year 25% minimum
2. up to 2 years 40% minimum
3. up to 3 years 50% minimum

Note: The manufacturer shall provide documentary evidence by way of certificate or declaration to this effect to Bureau of Indian Standards while applying for Ecomark

General Note:

The success of Ecomark scheme will largely depend on the availability of used/old batteries for recovery/recycling of lead in an environment friendly manner. In order to ensure the availability of used/old batteries the necessary arrangement may be made so that large consumers such as Defence, Railways, State Road Transport Corporations etc. are obliged to return the used/old batteries to the manufacturers or their authorised agents who will undertake recovery of lead by complying with the provisions of Water (PCP) Act 1974, Water (PCP) Cess Act 1977, Air (PCP) Act 1981 and Environment (Protection) Act, 1986 and the rules made there under.

The following BIS standards have incorporated the Ecomark requirements:

Indian Standards	Year of Incorporation	Descriptions
IS 7372:1995, Reaffirmed Year 2007	1996	Lead-acid storage batteries for motor vehicles

A. Dry Cell Batteries

(The Gazette of India, Extraordinary, Part II-Section 3(i), No.170, May18,1996)

General Requirements:

- The dry cell batteries shall meet the relevant standards of Bureau of Indian Standards.
- 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 there under.
- 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 the product performance and safe disposal.
- The material used for product packaging shall be recyclable or biodegradable.
- 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.

Product Specific Requirements:

- **Non-rechargeable dry cell batteries:**

The amount of mercury in batteries shall not exceed 0.005% by weight.

- **Re-chargeable dry cell batteries:**

The re-chargeable batteries shall not contain more than 0.005 per cent of mercury.

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

Indian Standards	Year of Incorporation	Descriptions
IS 8144:1997, Reaffirmed Year 2008	-	Multipurpose dry batteries
IS 9128:1999, Reaffirmed Year 2009	-	Heavy duty dry batteries
IS 13568 : 1992 Reaffirmed Year 2007	-	Lead acid light weight storage batteries for motor cycles and similar vehicles fitted with AC circuitry

Source: http://cpcb.nic.in/EnvironmetalPlanning/Eco-label/Battries.pdf