

Eco-mark Scheme

ECOMARK CRITERIA FOR LUBRICATING OILS (The Gazette of India, Extraordinary, Part II-Section 3(i), No. 364, Sept. 7, 1995)

GENERAL REQUIREMENTS :

- All lubricating/speciality oils shall meet relevant Indian Standards notified by Bureau of Indian Standards (BIS).
- 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.
- 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.
- The product packaging may display in brief the criteria based on which the product has been labelled Environment Friendly.
- The material used for product packaging shall be recyclable, reusable or biodegradable.
- 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.

PRODUCT SPECIFIC REQUIREMENTS :

- Lubricating Oils (Virgin) Following categories of oil are included :
 - a) Lubricants : Vegetable Oil based
 - b) Lubricants : Other than Vegetable Oil based

The product must not have toxic effect on aquatic organisms. EC 50/LC 50 shall not be less than 1.0 mg/litre.

The base oil, additives and formulated products must have per cent biodegradability as mentioned below :

Lubricants Biodegradability Minimum

Lubricants (Vegetable Oil based) 90%

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.

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.

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.

- Formulated Lubricants from Re-claimed/Re-refined Oils
- The product shall contain more than 50% by volume re-refined/recycled products, reclaimed through environmentally compatible re-refining process.

Note 1 : The manufacturer shall provide documentary evidence by way of certificate or declaration to this effect to Bureau of Indian Standards while applying for Ecomark.

Note 2 : The lubricants containing more than 2000 ppm of Halogens or more than 20 ppm of PCBs should be treated as Hazardous Waste and therefore shall not be re-refined/re-claimed.

The product shall meet the product specific requirements as per lubricating oils (Virgin)

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

1.	IS 493(Pt-I) : 1981	General purpose machinery and spindle oil : Part 1
2.	IS 493(Pt-II):1981	General purpose machinery and spindle oils : Part II
3.	IS 1012:1987	Specification for turbine Lubricating oils (second
4.	IS 1083:1978	Specification for industrial white oil (first revision)
5.	IS 1088:1987	Specification for lubricants for clock like mechanisms and
6.	IS 1115:1986	Specification for cutting oil soluble (second revision)
7.	IS 1118:1992	Specification for industrial white oil (first revision)
8.	IS 1277:1987	Specification for gear lubricants. regular (second

		revision)
9.	IS 1589:1960	Specification oil, cylinder (superseding IS 311:1951 & IS 316:1951)
10.	IS 1628:1986	Specification for Axie Oil (second revision)
11.	IS 1758:1986	Specification for jute batching oil (second revision)
12.	IS 2297:1987	Specification for gear lubricants, compounded (second revision)
13.	IS 2880:1964	Specification for oil, cylinder grade 4
14.	IS 2884:1980	Specification for quenching oil (second revision)
15.	IS 3065:1985	Specification for cutting oil, neat (second revision)
16.	IS 3098:1883	Specification for oil, hydraulic mineral oil type (second revision)
17.	IS 4543:1977	Specification for marquenching oil (first revision)
18.	IS 4578:1989	Specification for lubricating oils for refrigeration machinery (first revision)
19.	IS 8406:1993	Specification for gear lubricants for enclosed industrial gear drives (second revision)
20.	IS 8553:1987	Specification for straight mineral high demulsibility oils (first revision)
21.	IS 8654:1986	Automotive hydraulic brake fluid, heavy duty (first revision)
22.	IS 9182(Pt I):1993	Specification for lubricating for wire ropes and fibre cores : Part 1 Lubricants for fibre core of wire ropes
23.	IS 9182 (Pt II) : 1993	Specification for Lubricants for wire ropes and fibre cores : Part II Lubricants for wire strends and ropes.
24.	IS 9182 (Pt III) : 1993	Specification for lubricants for wire ropes and Fibre cores : Part III Lubricants for rope dressing in service.
25.	IS 9554:1980	Lubricants for open gears
26.	IS 9611:1980	Specification for cutting oil soluble clear
27.	IS 10522:1983	Antiwear hydraulic oil
28.	IS10532(PtI) : 1983	Fire resistant hydraulic fluids : Part I Dilute emulsions for powered supports
29.	IS 10532 (Pt II) : 1983	Fire resistant hydraulic fluids : Part II Invert emulsions water-in-oil type
30.	IS 10532 (Pt 3): 1983	Fire resistant hydraulic fluids : Part III Water glycol type

31.	IS 10532 (Pt 4): 1983	Fire resistant hydraulic fluids : Part IV Phosphate ester type
32.	IS 11186 : 1985	Synthetic grinding fluid
33.	IS 11656 : 1986	Antiwear hydraulic oil extra heavy duty type
34.	IS 11695 : 1986	Specification for inhibited type machinery oil
35.	IS 11696 : 1986	Specification for inhibited type spindle oil
36.	IS 12927 : 1989	Glass moulding oil, non-graphited
37.	IS 13256 : 1992	Air compressor lubricants - types DAA and DAB