

## Eco Mark Criteria for Aerosol Propellants

### General Requirements:

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, under Environment (Protection) Act 1986 and the rules made there under to BIS while applying for Eco Mark.

The product package shall be suitably marked that the Eco Mark label is applicable only to the propellants used in Aerosol sprays, if the product package is not separately covered under the Eco Mark Scheme.

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. The material used for product packaging shall be made from recyclable or biodegradable material

### Product Specific Requirements:

The aerosol propellants shall not contain any Ozone Depleting Substances (ODS) relevant to Aerosol industry as identified under Montreal Protocol (Annexure A)

NOTE: Use of mechanical devices for generation of aerosols shall be encouraged for Eco Mark. List of Controlled Substances (CDS) as identified under Montreal Protocol\*\*

### Annexure A Controlled Substances

Group	Substance	Ozone Depleting Potential*
Group I		
CFC1 3	(CFC-11)	1.0
CF 2 CL 2	(CFC-12)	1.0
C 2 F 3 Cl 3	(CFC-113)	0.8
C 2 F 4	Cl 2 (CFC-114)	1.0
C 2 F 5	Cl (CFC-115)	0.6
CF 2 BrCl	(halon-1211)	3.0
CF 4 Br	(halon-1301)	10.0
C 2 F 4 Br 2	(halon-2402)	6.0

\* These ozone depleting potentials are estimates based on existing knowledge and will be reviewed and revised periodically.

\*\* Source: Handbook for the Montreal Protocol on Substances that deplete the Ozone layer', Ozone Secretariat, UNEP, August 1993.

**Annexure B**  
**Controlled Substances**

Group	Substance	Ozone Depleting Potential*
Group I		1.0
CF 3 Cl	(CFC-13)	1.0
C 2 FCl 5	(CFC-111)	1.0
C 2 F 2 Cl 4	(CFC-112)	1.0
C 3 FCl 7	(CFC-211)	1.0
C 3 F 2 Cl 6	(CFC-212)	1.0
C 3 F 3 Cl 5	(CFC-213)	1.0
C 3 F 4 Cl 4	(CFC-214)	1.0
C 3 F 5 Cl 3	(CFC-215)	1.0
C 3 F 6 Cl 2	(CFC-216)	1.0
C 3 F 7 Cl	(CFC-217)	1.0
Group II		
CCL 4	carbon tetrachloride	
C 2 H 3 Cl 3 *	1,1,1-trichloroethane	
	(methyl chloroform)	

\* This formula does not refer to 1, 1, 2-trichloroethane.

Propellants used in aerosol products shall meet the relevant Standards of BIS. The incorporation of the Ecomark requirements, in the following BIS standards, is under process:

Indian Standards	Year of Incorporation	Descriptions
IS 14642 Part 2: 1999, Reaffirmed 2008	-	Compressed air for general use Part 2-Test methods for aerosol oil content
IS 12868: 1989, Reaffirmed 2006	-	Glass Aerosol Container
IS 9209: 1979 Reaffirmed 2010	-	Methods of tests for the compatibility of aerosol products with the metal aerosol dispensers
IS 8469: 1977 Reaffirmed 2011	-	Methods for sampling of aerosol valves
IS 8449: 1999, Reaffirmed 2010	-	Non-returnable metal aerosol dispensers
IS 8593 Part 3: 1984 Reaffirmed 2006	-	Recommendations centralized lubrication as applied to plant and machinery Part 3 Aerosol Lubrication
IS 9634: 1980, Reaffirmed 2010	-	Methods for sampling of aerosol valves

Source: <http://cpcb.nic.in/EnvironmentalPlanning/Eco-label/Aerosol.pdf>