TECHNICAL DATA SHEET

PROPYL PARABEN

Particular	Details
Product Name	PROPYL PARABEN
INCI Name	Propyl 4-hydroxybenzoate
CAS No.	94-13-3
EINECS No.	202-307-7
Date	01.04.2021

Description

Propylparaben is the benzoate ester that is the propyl ester of 4-hydroxybenzoic acid. It is a preservative typically found in many water-based cosmetics, such as creams, lotions, shampoos and bath products. It is also used as a food additive. It has a role as an antifungal agent and an antimicrobial agent. It is a benzoate ester, a member of phenols and a paraben. It derives from a propan-1-ol and a 4-hydroxybenzoic acid.

Typical Properties

Sr. No.	Test	Specifications
1	Appearance / Description	White or almost white, crystalline powder / Small colorless crystals or white powder
2	Solubility	Very slightly soluble in water, freely soluble in ethanol (96 per cent) and methanol. Freely soluble in alcohol and ether; slightly soluble in boiling water and very slightly soluble in water.
3(A)	Identification – Melting Point (°C)	96°C to 99°C
3(B)	Identification – IR	Compares to propyl parahydroxybenzoate reference spectrum
4	Appearance of Solution (BP)	A 10% w/v solution in ethanol (96 per cent) is clear and not more intensely coloured than reference solution BY6
5	Colour of Solution (USP)	The sample solution is clear and not more intensely coloured than alcohol or the comparison solution
6	Acidity	Not more than 0.1 ml of 0.1 M Sodium Hydroxide solution is required to change the colour of the indicator to blue
7	Related Substances by HPLC	Impurity A: Not more than 0.5%; Unspecified impurities: Not more than 0.5%; Total impurities: Not more than 1.0%
8	Sulphated Ash / Residue on Ignition	Maximum 0.1%, determined on 1.0 gm
9	Residual Solvent (USP/NF only)	Method IV <467>. Meets the requirements. n-Propanol: NMT 5000 ppm; Toluene: NMT 890 ppm
10	Assay by HPLC (as $C_{10}H_{12}O_3$)	98.0% to 102.0%

Applications and Recommended For

- Antimicrobial preservative in cosmetics.
- Bulk drug.
- Used as a food additive.

Features & Benefits

- Propyl Paraben is typically found in many water-based cosmetics such as creams, lotions, shampoos and bath products.
- Also used as a food additive.

Suggested Uses

- Propyl Paraben is used as an antimicrobial food additive.
- Propyl Paraben is used as a preservative in cosmetics.

Soluble In

- Methanol
- Ether

Toxicology Profile

Parameter	**Value**
Acute Toxicity (LD_{50})	< 3000 mg/kg (Oral Mouse)

Packaging

Sr. No.	**Packing Material**	**Size**
1	Fiber Drums	25 KG
2	Open Top HDPE Drum	25 KG