

Polysorbate 80 / 20

Pharmaceutical emulsifier

Product Description

Polysorbate 80 (Tween 80) and Polysorbate 20 (Tween 20) are non-ionic emulsifiers used in pharmaceutical liquid preparations, ophthalmic solutions and parenteral formulations. Available to BP/USP standards.

Certificate of Analysis

HSN Code: 3402.13

CAS Number: Polysorbate 80: 9005-65-5 Polysorbate 20: 9005-64-5

Parameter	Specification	Test Method
Appearance	Amber to yellow oily liquid	Visual
HLB Value (Polysorbate 80)	15.0	Calculated / Davies method
HLB Value (Polysorbate 20)	16.7	Calculated / Davies method
Water Content	"d 3 . 0 %	Karl Fischer
Acid Value	"d 2 . 0 m g K O H / g	Titration
Hydroxyl Value (PS80)	65–80 mg KOH/g	Acylation method
Saponification Value (PS80)	45–55 mg KOH/g	Titration
Peroxide Value	"d 1 0 m E q / k g	Iodometric titration
Heavy Metals	"d 1 0 p p m	ICP-MS

Physical Properties

Appearance: Amber to yellow oily viscous liquid

Odor: Characteristic mild fatty odor

Solubility: Soluble in water and many organic solvents

Packing: 25 kg / 200 kg HDPE or mild steel drums; 1 kg HDPE bottles for pharma/lab use

Storage: Store in cool, dry, well-ventilated area below 25°C. Protect from light and oxidation. Keep containers tightly sealed.

Safety & Handling

PPE: Gloves and safety goggles for bulk handling

Hazards:

- Low toxicity – GRAS status for food/pharma use
- Mild skin and eye irritant in concentrated form