

Poly Ethylene Glycols (PEG)

PEGs – 200 to 8000 molecular weight

Product Description

Polyethylene Glycols (PEGs) are versatile excipients used as solvents, lubricants, binders and plasticizers in pharmaceutical, cosmetic and industrial formulations. Available from PEG 200 to PEG 8000.

Certificate of Analysis

HSN Code: 3907.20

CAS Number: 25322-68-3

Classification: Polymer / Pharmaceutical Excipient

Parameter	Specification	Test Method
Appearance	Clear colorless liquid (PEG 400) / White solid (PEG 4000/6000)	Visual
Average Molecular Weight	200–8000 (grade dependent)	GPC / Viscometry
pH (5% solution)	4.5–7.5	USP <791>
Water Content	"d 0 . 5 %	Karl Fischer
Color (APHA)	"d 2 5	APHA scale
Viscosity	Grade dependent	USP <912>
Hydroxyl Value	Grade dependent (mg KOH/g)	ASTM E1899
Heavy Metals	"d 2 0 p p m	USP <231>

Physical Properties

Appearance: Clear colorless liquid (low MW) / White solid (high MW)

Molecular Formula: $\text{HO}(\text{CH}_2\text{CH}_2\text{O})_n\text{H}$

Molecular Weight: Grade dependent: PEG 400 (380–420) / PEG 6000 (5600–7000 g/mol)

Solubility: Miscible with water; soluble in many organic solvents

Melting Point: Grade dependent (PEG 1000: 37–40°C / PEG 6000: 55–62°C)

Packing: 25 kg HDPE drums (liquid grades); 25 kg bags (solid grades); bulk IBC containers

Storage: Store in a cool, dry, well-ventilated area away from oxidizing agents. Temperature: below 30°C.

Safety & Handling

PPE: Gloves, safety goggles, lab coat

Hazards:

- Low acute toxicity
- May cause mild eye irritation