Polyethylene Glycol 6000 (PEG 6000)

Properties and Characteristics

Polyethylene Glycol (PEG) is used as an emulsifier, additive, stabilizer, lubricant, solubilizing agent, washing agent, dispersing agent, parting agent, plasticizing agent, thickening agent, filling agent, viscosity conditioning agent and chemical intermediate. Ethylene glycol family solvency properties make PEG particularly useful in custom formulation of paints, dyes and inks.

Specifications

Property	Value
CAS Number	25322-68-3
EINECS Number	203-473-3
Molecular Formula	$HO(CH_2CH_2O)_nH$
Other Names	Poly(ethylene glycol)PEG

Grade	Appearance (25°C)	Color (Pt-Co)	Hydroxyl Value (mgKOH/g)	Molecular Weight	pH
PEG 200	Colorless liquid	≤ 40	510 - 623	180 - 220	5.0 - 7.0
PEG 300	Colorless liquid	≤ 40	340 - 416	270 - 330	5.0 - 7.0
PEG 400	Colorless liquid	≤ 40	255 - 311	360 - 440	5.0 - 7.0
PEG 600	Colorless liquid	≤ 40	170 - 208	540 - 660	5.0 - 7.0
PEG 800	White paste	≤ 40	127 - 156	720 - 880	5.0 - 7.0
PEG 1000	White paste	≤ 40	102 - 125	900 - 1100	5.0 - 7.0
PEG 1500	White solid	≤ 40	68 - 84	1350 - 1650	5.0 - 7.0

PEG 2000	White flake	≤ 50	51 - 63	1800- 2200	5.0 - 7.0
PEG 3000	White flake	≤ 50	34 - 42	2700 - 3300	5.0 - 7.0
PEG 4000	White flake	≤ 50	26 - 32	3600 - 4400	5.0 - 7.0
PEG 6000	White flake	≤ 50	16 - 21	5400 - 7000	5.0 - 7.0
PEG 8000	White flake	≤ 50	12 - 16	7200 - 8800	5.0 - 7.0

Applications

PEG-200 can be used as the medium of organic synthesis and have a higher heat carrier requirements in the chemical industry as a daily moisturizer, salt solubilizer, viscosity modifiers; in the textile industry as a softener, antistatic agent; and pesticides in the papermaking industry as a wetting agent.

PEG-400, PEG-600, PEG-800 matrix for pharmaceutical and cosmetics, rubber industry and textile industry lubricants and wetting agents. In addition, PEG-600 can be added to enhance the ground effect and enhance the luster of metal surfaces.

Key Applications

- Freeze protection, heat transfer and hydraulic fluids; natural gas and hydrocarbon treating agents;
- Hydroscopic agents for paper, cork and textile conditioning;
- Plasticizer formulations and raw materials for ester and polyester production.

Packaging

PEG 200 - 1500	1000kg/IBC drum or 200kg/metal drum (net weight)
PEG 2000 – 8000	25kg/kraft bag (net weight)