

PE 1000F

Polyethylene Wax

PRODUCT DESCRIPTION

PE 1000F is a polyethylene wax in flakes form, and is a fully saturated Homopolymer of ethylene. This has a high degree of linearity and crystallinity with molecular weight ranging from 500 to 1500. It has excellent heat stability and resistance to chemical attack. The melt viscosity is low, which is necessary for easy processing. The wax is soluble in solvents such as benzene, xylene, toluene, cyclohexane, decalin, chloromethane, and carbon tetrachloride. Additionally, the wax can also be dispersed in organic solvent and oil up to approximately 25% by weight. The fine dispersion obtained may be used in coating and ink formulations.

Properties	Unit	Method	Specification	Typical Data
Drop Melting Point	deg C	ASTM D-127	110minimum	112
Flash Point	deg C	ASTM D-92	185minimum	190
Density 25 deg C	g/cc	IP - 190	0.93minimum	0.935
Acid Value	Mg KOH/g	ASTM D-974	NIL	NIL
Needle Penetration 25 deg C	dmm	IP - 376	5maximum	4
Viscosity 140 deg C	C. St.	ASTM D-445	20 to 60	40

PRODUCT APPLICATIONS -

- 1) It works as a processing aid (at 0.5 to 5% uses level) for thermoplastics such as polyethylene, polypropylene and polystyrene. It may also be used as an antiblocking agent in thermoplastic elastomer processing. The wax also acts as a lubricant and release agent for engineering resins.
- 2) It improves rub, mar and slip resistance characteristics for ink and coating applications.
- 3) It finds application in hot melt adhesive formulation for increasing solidification point and rheology.
- 4) The wax finds applications in formulation of cable filling compounds to impart dimensional stability and prevent oil bleed.
- 5) The wax can also be used to improve the properties of low-grade paraffin wax by blending in small quantities.

FDA Status

PE 1000F meets the quality requirement of US FDA as specified in 21 CFR 172.888, 21 CFR 178.3720 and 21 CFR 177.1520