

Liquid Polyethylene Wax

Polyethylene Wax Emulsion

Liquid Polyethylene Wax is an extraordinary coarse particle size emulsion. This has been achieved by pressure-emulsifying without alkali-application. Because of the enlargement of the particles, the scuff resistance and anti-block is importantly improved.

Liquid Polyethylene Wax Liquid Polyethylene wax emulsion helps you improve a multitude of processes and products. They help make your printing inks perform better, manufacture more easily, and maintain cost-effectiveness. They give you a competitive edge in the marketplace that lets you increase profitability.

How You Can Use Liquid Polyethylene Wax Liquid Polyethylene wax emulsion

Polyethylene emulsion are a family of synthetic waxes used as additives or modifiers in printing inks to improve mar and abrasion resistance, slip, control of rheology, and other properties.

In ink applications, a fluid is spread in a thin layer on a substrate. The layer hardens into an adherent film through the action of any of a number of mechanisms. You can use polyethylene waxes to modify the properties of both the applied fluid and the final film. In the fluid, the polyethylene wax can control its rheology characteristics. In the final film, the low molecular weight polyethylene wax can modify surface properties, such as coefficient of friction, mar and abrasion resistance, and gloss. These property enhancements are important to ink manufacturers.

Important Characteristics

- ▶ Liquid Polyethylene Wax is an emulsion of high melting point polyethylene wax and does not contain APE.
- ▶ Liquid Polyethylene Wax is used as an additive in water based inks, coatings and over print varnishes, where improved slip, rub resistance, scratch resistance and/or block resistance are needed.
- ▶ Liquid Polyethylene Wax can be used as an additive to paper coatings, wood coatings, metal coatings, overprint varnishes, floor polish and other markets where slip and hardness are required, without significant degradation of gloss. Addition levels range from 3 – 10%, depending on application requirements.
- ▶ Excellent compatibility with acrylics & styrene acrylics

Ink and Coating Applications

- ▶ Improve rub and mar resistance and slip characteristics may be secured by addition of 0.5 to 2% Liquid Polyethylene Wax liquid polyethylene to lithographic and flexographic inks
- ▶ Improve flattening that is not subject to over-grinding may be obtained using Liquid Polyethylene Wax liquid polyethylene concentrations of about 3% because of its excellent resistance to solvents
- ▶ Improve slip characteristics may be achieved in stir-in ink applications where Liquid Polyethylene Wax liquid polyethylene can be used as substitutes for PTFE

The Competitive Edge

Liquid Polyethylene Wax Polyethylene emulsion offer many important advantages and properties that can be utilized effectively in a wide variety of ink formulations. The characteristics they provide let you make more efficient, cost-effective products that keep your customers satisfied

Typical Properties

Specifications	Method	Test results
Appearance	Visual	white liquid
Solids	Halogendryer	39.0 - 41.0 % (155°C)
pH value	Glasselectrode	3.0 - 4.0
Viscosity	Brookfield DV-I+	200 - 300 mPa.s (#3, 100rpm, 20°C)
Other Characteristics		
Ionic character		non-ionic
Wax content		31.0 - 33.0 %
Emulsifier content		7.0 - 9.0 %
Dilution		in all ratios with water