



Technical Data Sheet

Polyethylene Wax - PE Wax

Product Name: Polyethylene Wax

Common Name: PE Wax

Chemical Family: Polyethylene-based synthetic wax

Appearance: White flakes, powder, granules, or beads

Application Type: Industrial additive, lubricant, dispersing agent, release agent, surface modifier

1. Product Description

Polyethylene Wax - PE Wax is a low molecular weight polyethylene material used in plastics, PVC processing, masterbatch, coatings, inks, adhesives, rubber, and other industrial formulations. It offers excellent lubrication, low melt viscosity, good thermal stability, chemical resistance, and strong dispersion performance.

PE wax improves processing efficiency, surface smoothness, pigment dispersion, mold release, and final product appearance. It works especially well in systems that require controlled flow, reduced friction, and better surface protection.

2. Typical Properties

Property	Typical Value
Appearance	White flakes / powder / granules
Melting Point	100 - 115°C
Density	0.92 - 0.96 g/cm ³
Viscosity at 140°C	10 - 80 cps
Penetration at 25°C	1 - 5 dmm
Acid Value	Max. 1 mg KOH/g
Molecular Weight	Low molecular weight polyethylene
Color	White to off-white
Odor	Odorless to mild
Solubility in Water	Insoluble
Thermal Stability	Good
Chemical Resistance	Good



Note: Values are typical and may vary depending on product grade and production method.

3. Key Features

- Excellent internal and external lubrication
- Low melt viscosity
- Good pigment and filler dispersion
- High hardness
- Good thermal stability
- Strong chemical resistance
- Improved surface smoothness
- Better mold release
- Reduced friction during processing
- Good compatibility with polyolefins
- Improved gloss, slip, and abrasion resistance

4. Applications

Polyethylene Wax - PE Wax is suitable for:

- Color masterbatch
- Filler masterbatch
- PVC processing
- Plastic extrusion
- Injection molding
- Rubber processing
- Printing inks
- Paints and coatings
- Powder coatings
- Hot melt adhesives
- Cable compounds
- Road marking paints
- Polishes
- Textile finishing
- Paper coatings



5. Function by Industry

Industry	Main Function
Plastics	Lubrication, flow improvement, mold release
Masterbatch	Pigment and filler dispersion
PVC	Internal and external lubrication
Coatings	Scratch resistance, slip, surface protection
Inks	Rub resistance and scuff resistance
Adhesives	Viscosity control and hardness improvement
Rubber	Processing aid and release agent
Polishes	Gloss and surface smoothness

6. Recommended Dosage

Application	Recommended Dosage
Color masterbatch	1 - 5%
Filler masterbatch	1 - 4%
PVC processing	0.2 - 1.5 phr
Coatings	0.5 - 3%
Printing inks	0.5 - 3%
Hot melt adhesives	2 - 10%
Rubber processing	1 - 3%

The final dosage depends on formulation, processing conditions, and required performance. Lab testing is recommended before bulk use.

7. Packaging

Standard packaging options:

- 25 kg bags
- 20 kg bags
- Jumbo bags upon request

Packaging can vary based on supplier and customer requirements.



8. Storage

Store PE wax in a cool, dry, and well-ventilated area. Keep the product away from direct sunlight, moisture, heat sources, and open flames. Keep packaging closed when not in use.

9. Shelf Life

Typical shelf life is **24 months** from the production date when stored under recommended conditions in original sealed packaging.

10. Handling and Safety

Use standard industrial hygiene practices when handling PE wax. Avoid dust formation. Use protective gloves, safety glasses, and dust mask when needed. Keep away from ignition sources during processing.

For detailed safety information, refer to the product **Safety Data Sheet - SDS**.