



Material Safety Data Sheet (MSDS)

LDPE Wax (Low Density Polyethylene Wax)

Document Type: Material Safety Data Sheet (MSDS)

Product Name: LDPE Wax

Chemical Name: Low Density Polyethylene Wax

Product Category: Industrial Processing Aid / Lubricant / Polyethylene Wax

Revision Date: June 2026

Version: 1.0

Section 1: Identification of the Substance and Company

Product Identifier

- Product Name: LDPE Wax
- Synonyms: Low Density Polyethylene Wax, Polyethylene Wax, PE Wax
- CAS Number: Proprietary / Grade Dependent
- Chemical Family: Polyolefin Wax

Recommended Use

- PVC processing
- Masterbatch production
- Hot melt adhesives
- Coatings
- Printing inks
- Rubber processing
- Plastic compounding

Restrictions on Use

Use only for industrial and professional applications.

Emergency Contact

Emergency contact information should be provided by the product supplier.



Section 2: Hazard Identification

GHS Classification

LDPE Wax is generally not classified as hazardous under normal industrial handling conditions.

GHS Label Elements

Signal Word

Not Required

Hazard Pictograms

Not Required

Potential Hazards

Health Hazards

- Dust may cause temporary mechanical irritation to eyes.
- Dust may cause mild respiratory irritation.
- Molten material may cause thermal burns upon skin contact.

Physical Hazards

- Fine dust may create slippery conditions.
- Dust accumulation may present a combustible dust hazard under certain conditions.

Environmental Hazards

Not expected to pose significant environmental hazards under normal use.

Section 3: Composition / Information on Ingredients

Component	Concentration
Low Density Polyethylene Wax	≥ 99%
Additives (if applicable)	< 1%



Chemical Nature

Polyethylene-based synthetic wax.

CAS Number

Grade dependent.

Section 4: First Aid Measures

Eye Contact

Immediately flush eyes with clean water for at least 15 minutes.

If irritation persists, seek medical attention.

Skin Contact

Solid Material

Wash affected area with soap and water.

Molten Material

Cool affected area immediately with cold water.

Do not attempt to remove solidified material from skin.

Seek medical attention promptly.

Inhalation

Move affected person to fresh air.

If respiratory irritation persists, obtain medical advice.

Ingestion

Rinse mouth with water.

Do not induce vomiting.



Seek medical attention if discomfort occurs.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media

- Dry chemical powder
- Carbon dioxide (CO₂)
- Foam
- Water spray

Unsuitable Extinguishing Media

Avoid direct high-pressure water streams on molten material.

Specific Hazards

During combustion, LDPE Wax may produce:

- Carbon monoxide (CO)
- Carbon dioxide (CO₂)
- Hydrocarbon fumes
- Smoke

Protective Equipment for Firefighters

- Self-contained breathing apparatus (SCBA)
- Full protective clothing

Section 6: Accidental Release Measures

Personal Precautions

- Avoid generating dust.
- Wear appropriate protective equipment.
- Use caution as spilled material may create slip hazards.



Environmental Precautions

Prevent large quantities from entering drains, waterways, or soil.

Cleanup Methods

Solid Material

- Sweep or vacuum material.
- Collect in suitable containers.

Molten Material

Allow material to cool and solidify before removal.

Dispose according to local regulations.

Section 7: Handling and Storage

Handling

- Avoid excessive dust generation.
- Maintain adequate ventilation.
- Avoid contact with molten material.
- Follow good industrial hygiene practices.

Safe Handling Practices

- Use appropriate personal protective equipment.
- Wash hands after handling.
- Keep work areas clean.

Storage

Store in:

- Cool, dry location
- Well-ventilated area
- Original sealed containers

Keep away from:



- Strong oxidizing agents
- Open flames
- Excessive heat sources

Recommended Storage Temperature

Ambient temperature below 40°C when possible.

Section 8: Exposure Controls / Personal Protection

Engineering Controls

- General ventilation
- Local exhaust ventilation where dust is generated

Personal Protective Equipment (PPE)

Eye Protection

- Safety glasses
- Chemical safety goggles when necessary

Hand Protection

- Protective gloves
- Heat-resistant gloves when handling molten material

Skin Protection

- Long-sleeved work clothing
- Safety footwear

Respiratory Protection

Generally not required under normal conditions.

Use dust masks or approved respirators where dust concentrations are excessive.



Section 9: Physical and Chemical Properties

Property	Typical Value
Appearance	White powder, flakes, granules, or pellets
Odor	Mild or odorless
Physical State	Solid
Density	0.91 – 0.94 g/cm ³
Melting Point	95 – 115°C
Flash Point	> 250°C
Solubility in Water	Insoluble
Viscosity (140°C)	100 – 1,500 cps
Auto-Ignition Temperature	> 300°C
Vapor Pressure	Negligible
pH	Not Applicable

Section 10: Stability and Reactivity

Chemical Stability

Stable under recommended storage and handling conditions.

Conditions to Avoid

- Excessive heat
- Open flames
- Strong ignition sources

Incompatible Materials

- Strong oxidizing agents
- Strong acids under extreme conditions

Hazardous Decomposition Products

Thermal decomposition may generate:

- Carbon monoxide
- Carbon dioxide



- Hydrocarbon vapors
- Smoke

Hazardous Polymerization

Will not occur.

Section 11: Toxicological Information

Acute Toxicity

Not expected to be acutely toxic.

Skin Corrosion/Irritation

Not expected to cause irritation under normal handling.

Molten material may cause thermal burns.

Serious Eye Damage/Irritation

Dust may cause temporary mechanical irritation.

Respiratory Effects

Excessive dust may cause temporary respiratory irritation.

Carcinogenicity

No known carcinogenic components under normal industrial use.

Mutagenicity

Not expected to present mutagenic hazards.

Reproductive Toxicity

No known reproductive hazards under normal conditions of use.



Section 12: Ecological Information

Ecotoxicity

Not expected to be highly toxic to aquatic organisms.

Persistence and Degradability

Polyethylene materials degrade slowly in the environment.

Bioaccumulative Potential

Low expected bioaccumulation.

Mobility in Soil

Low mobility due to insolubility in water.

Environmental Precautions

Avoid uncontrolled environmental release.

Section 13: Disposal Considerations

Dispose of waste material according to:

- Local regulations
- National regulations
- Regional regulations

Recommended Disposal Methods

- Recycling where facilities exist
- Approved landfill disposal
- Approved waste management contractor

Do not dispose into drains or waterways.



Section 14: Transport Information

UN Number

Not regulated.

Proper Shipping Name

Not regulated for transport.

Hazard Class

Not classified as dangerous goods.

Packing Group

Not applicable.

Environmental Hazard

Not classified as environmentally hazardous for transport.

Applicable Transport Regulations

- ADR/RID
- IMDG
- IATA
- DOT

Generally not regulated under standard transport requirements.

Section 15: Regulatory Information

LDPE Wax is generally not classified as a hazardous substance under most industrial chemical regulations when supplied in solid form.

Users must verify compliance with:

- REACH (European Union)



- OSHA Hazard Communication Standard
- GHS Classification Requirements
- Local chemical inventory regulations

Requirements may vary by country and product grade.

Section 16: Other Information

Recommended Applications

- PVC processing
- Color masterbatch
- Filler masterbatch
- Hot melt adhesives
- Coatings
- Printing inks
- Rubber compounds
- Plastic processing

Key Safety Considerations

- Avoid inhalation of excessive dust.
- Prevent contact with molten material.
- Maintain good housekeeping practices.
- Use appropriate PPE during industrial handling.

Revision Information

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