

Material Safety Data Sheet Propylene Polymers

Section 1: Chemical Product and Company Identification

Product Name : Propylene Polymers
Chemical Formula : $(C_3H_6)_n$
Company Identification : Tradeasia International Pte Ltd
Email : contact@chemtradeasia.com

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	% by Weight
Polypropylene	9003-07-0	100

Toxicological Data on Ingredients: NA

Section 3: Hazards Identification

Physio-chemical properties : No hazards resulting from material as supplied.

Properties affecting health : No hazards resulting from material as supplied.

Environmental properties : No hazards resulting from material as supplied.

Classification System

This material is not hazardous by OSHA hazard communication definition.

Dust may form explosive mixtures with air.

At process Temperature irritating fumes may be produced.

The preparation does not meet the criteria for classification in accordance with Directive 1999/45/EC and Directive 1272/2008/EC

Section 4: First Aid Measures

GENERAL INFORMATION

At room temperature the product is neither an irritant nor gives off hazardous vapours. The measures listed below apply to critical situations (Fire, incorrect process conditions).

Eye Contact:

Dust, fines and process vapours may irritate the eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical attention if discomfort persists.

Skin Contact:

If molten material contacts the skin it may cause thermal burns, immediately flush with large amounts of cold water to cool the affected skin and polymer. Do not attempt to peel the polymer from skin. Obtain immediately emergency medical attention if burn is deep or extensive.

Inhalation: Dust and process vapours may irritate the nose, throat and respiratory tract. If symptoms are experienced, move victim to fresh air. Obtain medical attention if breathing difficulty persists.

Ingestion:

Adverse health effects due to ingestion are not anticipated. Do not induce vomiting. If symptoms develop, obtain medical attention.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 388 °C (752 °F)

Flash Points: 260 °C (500 °F).

Flammable Limits: N/A

- 1) Recommendations of suitable extinguishing equipment, and information about extinguishing equipment that is not appropriate for a particular situation: Foam, fog, dry chemicals, CO₂; water mist to cool exposed surfaces.
- 2) Advice on specific hazards that develop from the chemical during the fire, such as any hazardous combustion products created when the chemical burns: May include, but are not limited to, CO, CO₂, hydrocarbons, aldehydes, ketones, and volatile fatty acids.
- 3) Recommendations on special protective equipment or precautions for firefighters: Due to potential decomposition of the polymer, firefighters should be equipped with positive pressure self-contained breathing apparatus (SCBA) when fighting all indoor fires and any significant outdoor fires, and should fight fire from an upwind position.

Section 6: Accidental Release Measures

Personal Precautions:

- Avoid generating dust. Potential dust explosion hazard. Use only non-sparking tools.
- Material creates dangerous slipping hazard on hard surfaces.
- Ensure adequate ventilation, especially in confined areas. In case of insufficient ventilation wear suitable respiratory equipment.

Environmental Precautions:

- Avoid release to environment. Do not allow to enter drains, sewers or watercourses.

Methods of cleaning up:

- Take up mechanically and collect in suitable container for disposal.
- Good housekeeping must be maintained to avoid potential slipping problem.
- Keep walking surface free of spilled material to avoid slipping hazard.

Section 7: Handling and Storage

Handling:

- No special requirements necessary, if handled at room temperature.
- Avoid spilling the product, as this might cause falls.
- Will accumulate static charges that may cause an electric spark (ignition source).
- Take precautionary measures against static discharges.
- Do not eat, drink or smoke at the work place.
- After handling, wash face and hands before eating, drinking or smoking.

Storage:

Requirements to be met by storerooms and containers:

- This product may react with strong oxidising agents & should not be stored near such materials.
- Store the bags in areas protected with automatic sprinklers.
- Storage temperature should be ambient. (preferably below 50 °C)
- Open flames prohibited.
- Store the product in bags, car silos, container, or large cartons to avoid contamination.

Further information about storage conditions:

- Protect from heat and direct sunlight.
- Store container in a well ventilated position.
- Store under dry conditions.
- Specific applications: For industrial use only, for safe stacking follow the storage recommendations specific for this product

Section 8: Exposure Controls/Personal Protection

Engineering Controls:

Use in a well-ventilated area. If handling results in dust generation, special ventilation may be needed to minimize dust exposure. If heated material generates vapour or fumes, use process enclosures, local exhaust ventilation, or other engineering controls to control exposure.

Personal Protection:

Respiratory system

Product processing, heat sealing of film or operations involving the use of wires or blades heated above 300 °C may produce dust, vapour or fumes. To minimize risk of over exposure to dust, vapour or fumes it is recommended that a local exhaust system is placed above the equipment, and that the working area is properly ventilated. If ventilation is inadequate, use certified respirator that will protect against dust/mist.

Skin and body

Hot material: Wear heat-resistant protective gloves, clothing and face shield able to withstand the temperature

of the molten product. Cold material: None required; however, use of gloves is good industrial practice.

Hand

Hot material: Wear heat-resistant protective gloves able to withstand the temperature of the molten product.

Cold material: None required; however, use of gloves is good industrial practice.

The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eyes

Safety glasses with side shields. Use dust goggles if high dust concentration is generated.

Environmental Protection

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9: Physical and Chemical Properties

Physical state and appearance	: Solid Granules
Odor	: No significant odor.
Taste	: Not available.
Color	: Translucent to white.
pH	: Not available.
Boiling Point	: Not applicable.
Melting Point	: 130 °C - 170 °C
Critical Temperature	: Not available.
Vapor Pressure	: Not applicable.
Vapor Density	: Not applicable.
Flash point	: > 300 °C
Autoignition temperature	: > 400 °C
Density	: 0.850-0.950 g/cm ³
Odor Threshold	: Not available.
Percent Volatile by volume(%)	: < 0.1
Solubility	: insoluble

Section 10: Stability and Reactivity Data

Chemical stability

This product is stable under normal use conditions for shock, vibration, pressure or Temperature. Decomposes at prolonged heating above 3000 C.

Chemical stability – Condition to avoid

Avoid strong oxidizing agents. Avoid Processing Material over 300 °C. Avoid Heat & direct sunlight.

Hazardous Polymerisation

Not likely to occur

Corrosivity

Product is not corrosive

Materials to avoid

Direct contact with open flames, self-igniting and explosive materials.

Dangerous products of decomposition:

No hazardous decomposition products known at room temperature. At elevated temperature the material will begin to decompose producing fumes that can contain CO₂, CO, Ketones & Aldehydes.

Section 11: Toxicological Information

Low toxicity under normal conditions of handling and use.

ACUTE TOXICITY:

Primary irritant effect:

On the skin: No irritant effects from normal handling and use. Dust may have irritant effect on skin.

On the eye: No irritant effect. Dust may have irritant effect on eyes. Permanent damage is unlikely.

Sensitization: No sensitizing effect known.

Ingestion: Low oral toxicity. Polypropylene Copolymer: LD₅₀, oral (rat): >5000 mg/kg

Inhalation: Low acute toxicity. Dusts and vapours or fumes evolved during thermal processing may cause irritation to the respiratory system.

CHRONIC TOXICITY:

On long term exposure: Chronic effects unlikely

Carcinogenic effects: No information available

Mutagenic effects: No information available

Reproductive toxicity: No information available

ADDITIONAL TOXICOLOGICAL INFORMATION:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

Section 12: Ecological Information

Information about elimination (persistence and degradability): The product is not biodegradable.

Effect of material on Plants or Animals: Eco-toxicity is expected to be minimal based on the low water solubility of polymers.

Toxicity: This material is not volatile and it is insoluble in water. Low toxicity to aquatic organisms.

Effect on Effluent Treatment: Unlikely to affect biological treatment processes.

General notes:

The product is not toxic, small particles can have physical effects on water and soil organisms

Section 13: Disposal Considerations

Product:

Recommendation:

Recycle (Reprocess)

Do not allow to enter drains, sewers or watercourses.

Disposal through landfilled or controlled incineration or authorised waste dump in accordance with Local, State or National Regulations.

Waste generators must determine whether a discarded chemical is classified as a hazardous waste.

Uncleaned Packaging:

Recommendation:

Disposal must be done according to local/official regulations. Refer to manufacturer/supplier for information on recovery/recycling.

Section 14: Transport Information

Land transport

ADR/RID Class: Not classified as dangerous in the meaning of transport regulations.

Sea transport

IMDG Class: Not classified as dangerous in the meaning of transport regulations.

Air transport

ICAO/IATA Class: Not classified as dangerous in the meaning of transport regulations.

Section 15: Other Regulatory Information

National regulations, other regulations, limitations and prohibitive regulations

EC Classification: Not classified as dangerous for supply/use.

Hazard Symbol: Not applicable.

Risk Phrases: Not applicable.

Safety Phrases: Not applicable.

PP manufactured by OPaL shall meet the requirement stipulated in IS: 10910 on Specification for Polypropylene and its copolymer for safe use in contact with foodstuff, Pharmaceuticals & Drinking Water.

Additives incorporated in this product shall conform to the positive list of constituents as prescribed in IS: 10909. The product & additives incorporated in it shall also comply with FDA: CFR Title 21,177.1520 Olefin Polymer.

For specific regulatory compliance related information please contact OPaL

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Tradeasia International Pte. Ltd. Be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Tradeasia International Pte. Ltd. has been advised of the possibility of such damages.