

Safety Data Sheet

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Section 1: Identification

1.1. Product identifier

Product form : Mixture

Product Identifier(s) : Polypropylene Homopolymer

Polypropylene

This SDS covers all prime homopolymer polypropylene grades including but not limited to:

Polypropylene 3###ABC

Polypropylene M3###ABC or Polypropylene Lumicene® M3###ABC

Polypropylene GPH##ABC Polypropylene PPH #### Polypropylene PPH #####

where # can be any number and "ABC" may be any combination of letters (the letters may or may not be present), EXCEPT 3377HA, 3727W, 3727WZ, 3847MR, and 3944MR.

This SDS also covers experimental grades which are homopolymers including LX1 xx-xx, LX5 xx-xx, & EOD xx-xx, and specially compounded samples labeled Polypropylene Nxxxxx and Nxxxxx-x, where x may be any number.

1.2. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Manufacture of plastic articles

1.3. Details of the supplier of the safety data sheet

TotalEnergies Petrochemicals & Refining USA, Inc. P O Box 674411 Houston, TX 77267-4411

For non-emergency product information:

Phone: 713-483-5000

Email: product.stewardship@totalenergies.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300 (Toll Free USA & Canada) / 703-527-3887 (Multiple languages)
TotalEnergies Petrochemicals & Refining USA, Inc.: 1-800-322-3462 (Language: English only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Combustible Dust

2.2. Label elements

GHS US labeling

Signal word (GHS US) : Warning

Hazard statements (GHS-US) : If small particles are generated during further processing, handling or by other means,

may form combustible dust concentrations in air

2.3. Hazards not otherwise classified

Other hazards which do not result in

classification

: None known.

2.4. Unknown acute toxicity (GHS-US)

Not applicable

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2.5. Additional information

Based on conditions common to industrial workplace use of this product

Plastic bag or liner may cause a static ignition hazard.

Spilled pellets may create a slipping hazard. Sweep up spillage and dispose of properly.

Skin or eye contact with hot polymer can cause thermal burns.

Processing the polymer at high temperatures may form vapors that irritate the eyes and respiratory tract

Section 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	CAS-No.	% (Weight Percent)
Polypropylene homopolymer	9003-07-0	≥ 98
Additives* (not contributing to the hazard classification)	Trade Secret	≤ 2*

^{*}Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Section 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. If necessary seek medical

advice.

First-aid measures after skin contact

: Gently wash with plenty of soap and water. Heated Material: For serious burns from heated material, get medical attention. In case of skin contact, immediately immerse in or flush with clean, cold water. Do not attempt to remove adhered material from skin.

First-aid measures after eye contact

: Rinse eyes with water as a precaution. Obtain medical attention if irritation persists. In case of eye contact with hot material, cool immediately with plenty of water and obtain immediate

medical treatment.

First-aid measures after ingestion : Remove material from mouth. Rinse mouth out with water. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after inhalation

: Nuisance dusts can be irritating to the upper respiratory tract. Irritating vapors may form when the polymer is processed at high temperatures.

Symptoms/effects after skin contact

: Contact with skin or eyes with hot material may cause serious thermal burns.

Symptoms/effects after eye contact

: Dust from this product may cause minor eye irritation. Contact with skin or eyes with hot

material may cause serious thermal burns.

Symptoms/effects after ingestion : No effects are expected for ingestion of small amounts. May be a choking hazard.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media : For small fire: Dry chemical. Carbon dioxide. Water. For large fire: Foam. Water spray.

: Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the chemical

Fire hazard

: May be combustible at high temperature. Vapors generated from

overheating/melting/decomposition may be flammable and may cause fire/explosion if source of ignition is present.

Explosion hazard

 Potential dust explosion hazard. When dust becomes airborne and is exposed to an ignition source, sufficient combustible/flammable dust may exist to burn in the open or explode if confined.

Hazardous decomposition products in case of

fire

: Carbon oxides (CO, CO2). Aldehydes. Ketones. Hydrocarbons. Fire will produce dense black smoke. Soot.

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5.3. Advice for firefighters

Firefighting instructions

: Fight fire from safe distance and protected location. Avoid raising powdered materials into airborne dust, creating an explosion hazard. Apply aqueous extinguishing media carefully to prevent frothing/steam explosion. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing

apparatus. Complete protective clothing.

Other information : Fire may re-ignite itself after fire is extinguished.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Emergency procedures for non-emergency personnel

: Material creates a slipping hazard on hard surfaces. Clean up spills from walking surfaces immediately.

6.2. Methods and material for containment and cleaning up

Methods for cleaning up

: On land, sweep or shovel into suitable containers. Do not allow water contaminated with pellets or powder to enter any waterway, sewer or drain.

Other information

: Dispose of contaminated material at an authorized site. Notify authorities if product enters sewers or public waters.

6.3. Reference to other sections

No additional information available

Section 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Wear personal protective equipment. Do not overheat the product. Avoid contact with heated product to prevent burns.

When handled in bulk quantities, this product and its associated packaging may present a crushing hazard due to the large masses involved, possibly resulting in severe injury or death.

Combustible dust precautions: Handling this product may result in electrostatic accumulation. Use proper grounding procedures. Use only non-sparking tools. Avoid raising powdered material due to explosion hazard. Prevent the build-up of electrostatic charge. The plastic packaging film used to secure bags of material on pallets can also develop static electricity – remove packaging film in an area free from ignitable vapors/dust.

Processing or material handling equipment may generate dust of sufficiently small particle size, that when suspended in air may be explosive. Dust accumulations should be controlled through a comprehensive dust control program that includes, but is not limited to, source capture, inspection and repair of leaking equipment, routine housekeeping and employee training in hazards. Refer to the latest edition of the National Fire Protection Association (NFPA) 654 publication, "Standard for the Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical, and Plastics Industries", and "Combustible Dust in Industry: Preventing and Mitigating the Effects of Fire and Explosions" (OSHA SHIB, July 31, 2005, updated Nov. 12, 2014, https://www.osha.gov/dts/shib/shib073105.html) for a complete discussion on dust explosion prevention and control measures.

Hygiene measures

: Do not eat, drink or smoke when using this product. Keep away from food and drink. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Ground/bond container and receiving equipment. Electrostatic charges may be generated when emptying sacks. It is recommended that sacks are emptied away from explosive atmospheres.

Storage conditions

: Store at room temperature. Protect from heat and direct sunlight. Store in dry, cool, well-

ventilated area.

Incompatible materials : Strong oxidizing agents.

Section 8: Exposure controls/personal protection

8.1. Occupational Exposure Limits

The following constituents are the only constituents of the product which have a PEL, TLV, or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

Polypropylene Homopolymer		
USA ACGIH	ACGIH OEL TWA	10 mg/m³ (Inhalable fraction)
		3 mg/m³ (Respirable Particles)
USA ACGIH	Remark (ACGIH)	Particulates, not otherwise classified
USA OSHA	OSHA PEL (TWA) [1]	5 mg/m³ Respirable fraction

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USA OSHA	Remark (OSHA)	Note: OSHA Total Dust 15 mg/m³

8.2. Exposure controls

Appropriate engineering controls : Provide readily accessible eye wash stations and safety showers. Ensure adequate ventilation.

If handling results in dust generation or high temperatures, local exhaust ventilation should be provided to insure that exposure to dust or decomposition products does not exceed the

exposure recommended levels.

Hand protection : Use insulated gloves when handling this material hot.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing. Safety foot-wear.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Other information : In case of risk of overexposure to dust, vapour or fumes (during product processing), it is

recommended that a local exhaust system is placed above the conversion equipment (a fume

hood) and the working area must be properly ventilated.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Color : No data available Odor : No data available Odor threshold No data available pΗ Not applicable Relative evaporation rate (butyl acetate=1) : Negligible. Melting point : 120 - 170 °C Freezing point : No data available **Boiling point** No data available : No data available Flash point : No data available Auto-ignition temperature Decomposition temperature : No data available Flammability (solid, gas) : No data available No data available Vapor pressure Relative vapor density at 20 °C : No data available : No data available Relative density Density : 0.9 - 0.95 g/mlSolubility : No data available : No data available Partition coefficient n-octanol/water (Log Kow) Viscosity, kinematic : Not applicable Viscosity, dynamic : No data available

9.2. Other information

No additional information available

Section 10: Stability and reactivity

10.1. Reactivity

Explosion limits

Flowing product can create electrical charge, resulting sparks may ignite dust or cause an explosion in some concentration ranges.

: No data available

10.2. Chemical stability

The product is stable at normal handling and storage conditions.

10.3. Possibility of hazardous reactions

Dust may form explosive mixture in air.

10.4. Conditions to avoid

Avoid dust formation. Avoid the build-up of electrostatic charge. Heat. Open flame. Sparks. Direct sunlight.

10.5. Incompatible materials

Strong oxidizing agents.

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Hazardous decomposition products

Hazardous decomposition products formed under fire conditions: carbon monoxide, carbon dioxide, toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified Acute toxicity (dermal) : Not classified Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified : Not classified

Polypropylene homopolymer (9003-07-0)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	Not listed

Reproductive toxicity : Not classified

STOT-single exposure : Not classified STOT-repeated exposure : Not classified Aspiration hazard : Not classified

Section 12: Ecological information

12.1. **Toxicity**

Carcinogenicity

No additional information available

12.2. Persistence and degradability

Polypropylene Homopolymer	
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Persistence and degradability	This material is persistent in the environment. Not readily biodegradable.

12.3. **Bioaccumulative potential**

Polypropylane Homopolymer	
i dispropsiene nomoporsinei	
Bioaccumulative potential	This product is not expected to bioaccumulate through food chains in the environment.

12.4. Mobility in soil

Polypropylene Homopolymer	
Ecology - soil	low mobility.

12.5. Other adverse effects

Other information : Avoid release to the environment.

Section 13: Disposal considerations

Waste treatment methods 13.1.

Waste treatment methods This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the

user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Transfer to a safe disposal area in accordance with federal, state,

and local regulations.

Product/Packaging disposal recommendations Recycle the material as far as possible.

Additional information : May be used as fuel in suitably designed installations.

Section 14: Transport information

US Transport (DOT) for Bulk Shipments (Non-Bulk Shipments May Differ)

Not regulated by US DOT

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Transport by sea (IMDG)

Not regulated by IMDG

Air transport (IATA)

Not regulated by IATA

Section 15: Regulatory information

15.1. US Federal regulations

EPA TSCA Status

All components of this product are listed or exempt from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) Active inventory. This product has no special requirements under TSCA, such as significant new use rules (SNUR), consent orders, test rules, or sections 4, 5, 6, 8(a), 8(d), 12(b) requirements.

SARA Section 313 Supplier Notification

This product contains no toxic chemicals in excess of the applicable de minimis concentration that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA Section 311/312 Hazard Classes Physical hazard - Combustible dust

Export Control Classification Number (ECCN): EAR99 (No License Required)

15.2. International regulations

CANADA

Polypropylene Homopolymer

WHMIS Classification This product is not regulated according to WHMIS 2015 classification criteria

National inventories

Polypropylene Homopolymer

Contact TotalEnergies Petrochemicals & Refining USA, Inc. to obtain the Canadian DSL/NDSL status of a particular product grade.

15.3. US State regulations

This product may contain California Proposition 65 substances at concentration levels below those required to be classified as hazardous by OSHA's Hazard Communication Standard (29 CFR 1910.1200). Contact TotalEnergies Petrochemicals & Refining USA, Inc. if you need specific information regarding status of this product with regard to California Proposition 65.

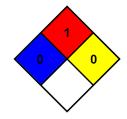
Section 16: Other information

Other information

Unless agreed to in a separate written agreement with the Customer, TotalEnergies Petrochemicals & Refining USA, Inc. makes no representations and disclaims all warranties, express or implied, with respect to biocompatibility and/or the suitability of this product for medical device applications including: (i) implantable devices intended for human or animal body, (ii) devices intended to be used in contact with internal body fluids, and (iii) devices intended to be used in contact with internal body tissues. If the Customer intends to use this product for any such application, it must first contact TotalEnergies Petrochemicals & Refining USA, Inc. and establish agreed terms and conditions for such use.

NFPA (National Fire Protection Association)

NFPA health hazard : 0
NFPA fire hazard : 1
NFPA reactivity : 0



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Hazard System Rating

Health : 0
Flammability : 1
Physical Hazard : 0

Personal protection : See section 8 of SDS

US OSHA LABEL as specified under 29 CFR §1910.1200 (f). The label shown may include supplemental information in addition to required elements.

Polypropylene Homopolymer

TotalEnergies Petrochemicals & Refining USA, Inc.

PO Box 674411

Houston, TX 77267-4411 USA

Tel. 713-483-5000

Warning

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Spilled pellets may create a slipping hazard. Sweep up spillage and dispose of properly.

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