



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

Product Identifier(s)

#### : Mixture

Polypropylene Homopolymer Polypropylene

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

3###ABC M3###ABC GPH##ABC PPH #### PPH #####

where # can be any number and "ABC" may be any combination of letters (the letters may or may not be present), EXCEPT 3287WZ, 3354, 3374HA, 3375HA, 3377HA, 3481Z, 3627R, 3727W, 3727WZ, 3847MR, and 3944MR.

This MSDS 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

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

For non-emergency product information: Phone: 713-483-5000 Email: product.stewardship@total.com

### 1.4. Emergency telephone number

Emergency number

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

#### Section 2: Hazards identification

#### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Combustible Dust

#### 2.2. Label elements

#### GHS-US labeling

### Signal word (GHS-US)

#### : Warning

Hazard statements (GHS-US)

K and all a surfaces

2.3. Hazards not otherwise classified

: If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air

# No additional information available

# 2.4. Unknown acute toxicity (GHS US)

Not applicable

# 2.5. Additional information

Based on conditions common to industrial	: Plastic bag or liner may cause a static ignition hazard.	
workplace use of this product	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.	



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# Section 3: Composition/Information on ingredients

# 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	CAS No	%
Polypropylene homopolymer	9003-07-0	>= 98
Additives (chemical identity withheld as a trade secret)	Trade Secret	<= 2 (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	<ul> <li>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.</li> </ul>
First-aid measures after ingestion	: Remove material from mouth. Rinse mouth out with water. Do NOT induce vomiting.
4.2. Most important symptoms and effect	ets, both acute and delayed
Symptoms/injuries 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/injuries after skin contact	: Contact with skin or eyes with hot material may cause serious thermal burns to skin or eyes.
Symptoms/injuries 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 to skin or eyes.
Symptoms/injuries 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

No additional information available

Section 5. Eirofighting measures	
Section 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: For small fire : Dry chemical. Carbon dioxide. Water. For large fire : Foam. Water spray.
Unsuitable extinguishing media	: Do not use a solid water stream as it may scatter and spread fire.
5.2. Special hazards arising from the ch	emical
Fire hazard	<ul> <li>May be combustible at high temperature. May form combustible dust concentrations in air. Vapors generated from overheating/melting/decomposition may be flammable and may cause fire/explosion if source of ignition is present.</li> </ul>
Explosion hazard	<ul> <li>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.</li> </ul>
Hazardous decomposition products in case of fire	: Carbon oxides (CO, CO2). Aldehydes. Ketones. Hydrocarbons. Fire will produce dense black smoke. Soot.
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	<ul> <li>Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.</li> </ul>
Other information	: May re-ignite itself after fire is extinguished.
Section 6: Accidental release measu	ires
6.1. Personal precautions, protective eq	uipment and emergency procedures
Emergency procedures for non-emergency	: Material creates a slipping hazard on hard surfaces. Clean up spills from walking surfaces

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 containm	ent 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 section No additional information available	ns
Section 7: Handling and sto	prage
7.1. Precautions for safe hand	dling
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", for 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 stora	ge, including any incompatibilities
Technical measures	: Ground/bond container and receiving equipment. Electrostatic charges may be generated wher 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 Home	opolymer	
USA ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (Inhalable fraction)
		3 mg/m <sup>3</sup> (Respirable Particles)
USA ACGIH	Remark (ACGIH)	Particulates, not otherwise classified
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> Respirable fraction
USA OSHA	Remark (OSHA)	Note: OSHA Total Dust 15 mg/m <sup>3</sup>

# 8.2. Exposure controls

Appropriate engineering controls	<ul> <li>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.</li> </ul>
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



White.

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Ap	opearance	:	Pellets.
С	blor	:	Translucent. Opaque.
0	dor	:	Odorless.
0	dor threshold	:	No data available
p⊦	1	:	Not applicable
Re	elative evaporation rate (butyl acetate=1)	:	Negligible.
M	elting point	:	120 - 170 °C
Fr	eezing point	:	No data available
В	piling point	:	No data available
Fl	ash point	:	No data available
Aι	uto-ignition temperature	:	No data available
De	ecomposition temperature	:	No data available
Fl	ammability (solid, gas)	:	No data available
Va	apor pressure	:	No data available
Re	elative vapor density at 20 °C	:	No data available
Re	elative density	:	No data available
So	blubility	:	Water: Negligible.
Lc	og Kow	:	No data available
Vi	scosity, kinematic	:	Not applicable
Vi	scosity, dynamic	:	No data available
E	cplosion limits	:	No data available

#### 9.2. Other information

No additional information available

### Section 10: Stability and reactivity

## 10.1. Reactivity

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

### 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.

#### 10.6. 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 effe	ects	
Likely routes of exposure	: Inhalation. Ingestion. Skin and eye contact.	
Acute toxicity	: Not classified	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Polypropylene homopolymer (9003-07-0)		
IARC group	3 - Not classifiable	
Reproductive toxicity	: Not classified	



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Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

# Section 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

# 12.2. Persistence and degradability

12.2.	Persistence and degradability	
Polypro	pylene Homopolymer	
Persiste	nce and degradability	This material is persistent in the environment. Not readily biodegradable.
BOD (%	of ThOD)	Below detection limit
12.3.	Bioaccumulative potential	
Polypro	pylene Homopolymer	
Bioaccu	mulative potential	This product is not expected to bioaccumulate through food chains in the environment.
12.4.	Mobility in soil	
Polypro	pylene Homopolymer	
Ecology	- soil	low mobility.
12.5.	Other adverse effects	
Other in	formation	: Avoid release to the environment.
Sectio	n 13: Disposal considera	tions
13.1.	Waste treatment methods	
Waste t	<ul> <li>Ste treatment methods</li> <li>This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of 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, sta and local regulations.</li> </ul>	
	lisposal recommendations	: Recycle the material as far as possible.
Waste c		

US Transport (DOT) for Bulk Shipments (Non-Bulk Shipments May Differ) Not regulated by US DOT

## 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 excluded from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

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



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### 15.2. International regulations

#### CANADA

Polypropylene Homopolymer WHMIS Classification

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR Uncontrolled product according to WHMIS classification criteria

### National inventories

No additional information available

## 15.3. US State regulations

No additional information available

Section 16: Other information		
Other information	acceptable business/technical terms necessary for medical device applications eveloped by contacting your Total Petrochemicals & Refining USA, Inc. sales Vithout such documented business terms, Total Petrochemicals & Refining US o representations and disclaims all warranties, express or implied, concerning nd/or suitability of this product for medical device applications.	representative. SA, Inc. makes
NFPA (National Fire Protection Association)		
NFPA health hazard		
NFPA fire hazard		
NFPA reactivity		>

HMIS III 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)

# **Polypropylene Homopolymer**

Total Petrochemicals & Refining USA, Inc. PO Box 674411 Houston, TX 77267-4411 USA Tel. 713-483-5000

# Warning

If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air Supplemental 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.

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# Safety Data Sheet

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