



मंगलूररिफाइनरीएंडपेट्रोकेमिकल्सलिमिटेड
MANGALORE REFINERY & PETROCHEMICALS LIMITED
(ऑयलएंडनैचुरलगैसकारपोरेशनलिमिटेडकीसहायककंपनी)
(A Subsidiary of Oil and Natural Gas Corporation Ltd)

MATERIAL SAFETY DATA SHEET

PRODUCT NAME :POLYPROPYLENE (PP) PELLET

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY

Product Name : MANGPOL Polypropylene Pellet		Chemical Designation : Polypropylene (PP) Homo polymer	
Trade Name: MANGPOL Polypropylene Pellet		Synonyms: Plastic/Polymer	
Formula: - Not Available (NA)	Label : NA Category Class :	CAS No: 9003-07-0	UN No. : NA
Shipping Name: MANGPOL Polypropylene		Hazchem Code : Not available	
Firm's Name: Mangalore Refinery & Petrochemicals Ltd.		Mailing Address: At P.O Kuthethoor, Mangalore- 575030 (D.K.) Email: mrplmlr@mrpl.co.in	
Telephone Number: (0824)2270400 Corporate website: www.mrpl.co.in		Tele Fax. Number: (0824)2270013	
Contact no In Case of Emergency:		Emergency Telephone During Transit :(0824)2883333	
		Fire & Safety ,Control Room TEL: : 0824 288 2333 / 3333	

2. HAZARD IDENTIFICATION

Component: Polyolefin	Pictograms: None	Signal Word: None
Hazard Statements This product is not classified as dangerous by OSHA hazard communication definition.		



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Information Pertaining To Particular Dangers for Man And Environment

Negligible hazard at ambient temperature (-18 Deg C to +50 Deg C)

Product is not considered to be hazardous under normal processing conditions.

- 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.

3.COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Content (Normal)*	CAS No.
Polypropylene	99.25 wt%	9003-07-0
Proprietary additives	<=0.75 wt%	Mixture

* For different grades of PP, minor changes may be there.

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).

Modes of Exposure	Symptoms/Effects	First-aid measures
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Inhalation	If symptoms are experienced, move victim to fresh air. Obtain medical attention if breathing difficulty persists.	If inhaled, remove to fresh air. If breathing is difficult, administer oxygen. If not breathing or if no heartbeat, give artificial respiration or cardiopulmonary resuscitation (CPR). Immediately call a physician.
Skin contact	If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissues and polymer. Do not attempt to peel the polymer from skin. Obtain immediately emergency medical attention if burn is deep or extensive.	Take off all contaminated clothing immediately. Wash off with soap and plenty of water. Wash contaminated clothing before re-use. Seek medical advice if symptoms persist or develop.
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.	Remove contact lenses if present. Immediately flush eyes thoroughly with warm water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Do not rub the eyes. Seek medical advice.
Ingestion	Adverse health effects due to ingestion are not anticipated.	.

5. FIRE FIGHTING MEASURES

Flash Ignition Temperature : 335°C

Auto Ignition Temperature : 350°C

Flammable Limits : NA

Suitable extinguishing media : Water, Foam, Carbon Dioxide, Dry Chemical Powder.

Unsuitable extinguishing media: Do not use high volume water jet or water spray.

Special hazards caused by the material, its products of combustion or resulting gases: In case of fire it can release: Carbon dioxide (CO₂), and when lacking oxygen (O₂), carbon monoxide (CO), Ketones & Aldehydes. The products of the burning are dangerous. The formation of hydrocarbons and aldehydes are possible in the initial stages of a fire (especially in between 400°C and 700°C).



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Special protective equipment for fire-fighters: Respiratory & Eye protection for fire fighting personnel .Wear full protective clothing, including helmet, self-contained breathing apparatus, protective clothing and face mask. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray.

Precautions for fire-fighters: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray.

Additional information : Heat value: 8000 - 11000 kcal/kg

6. ACCIDENTAL RELIEF MEASURES

Spill and Leak procedure: Sweep up spilled material for use or disposal. Good house keeping must be maintained to avoid potential slipping problem.

Caution: Keep walking surface free of spilled material to avoid slipping hazard.

Emergency procedures : Ventilate the area. Evacuate personnel to safe areas. Keep upwind. Keep out of low areas.

Environmental Precautions : Avoid release to environment. Do not allow to enter drains, sewers or watercourses

Methods for 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.

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.



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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.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

List	Components	CAS-No.	Type:	Value
OSHA	Polypropylene	9003-07-0	No Occupational Exposure limit assigned	
	Inert or Nuisance Dust	-	LTEL (8 hr TWA mg/m ³)	15mg/m ³ (total dust) 5 mg/m ³ (respirable dust)

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.

Individual Protection Measures

Eye protection	Safety glasses with side shields. Use dust goggles if high dust concentration is generated.
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Hand protection :	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.
Skin and body protection :	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.
Respiratory protection :	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.

NOTE: Limits shown for guidance only. Follow applicable regulations.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Form:** Solid granules
- **Colour :** translucent or white opaque
- **Odour :** odourless
- **Melting point/melting range :** 130-170 °C
- **Decomposition Temperature:** > 300°C
- **Explosion limits:-** lower 20 g/m³ (for polymer dust only < 63 μm)- upper approx. 2000 g/m³
- **Ignition temperature:** > 360 °C
- **Density :** (23 °C) 0.85-0.93 g/cm³
- **Bulk density:** 400 – 600 kg/m³
- **Solubility in water:** insoluble
- **Additional information:** Soluble in boiling, aromatic chlorinated solvents

10. STABILITY AND REACTIVITY

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.

The product is a stable thermoplastic, with no chemical reactivity under normal handling and storage Conditions. Substances to avoid: strong oxidation agents



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Conditions to avoid. Avoid strong oxidizing agents. Avoid Processing Material over 300°C

Corrosively: Product is not corrosive

Hazardous Polymerisation Not likely to occur

11. TOXICOLOGICAL INFORMATION

Additional information

In our experience and according to information available to us the product is not harmful to health provided it is correctly handled and processed according to the given recommendations.

12. ECOLOGICAL INFORMATION

Further ecological information

The product has not been tested. Due to its consistency and its low water solubility, bio-availability is unlikely.

13. DISPOSAL CONSIDERATIONS

Product Recommendation:

- Recycle (Reprocess)
- Do not allow to enter drains, sewers or watercourses.
- Disposal through landfills 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 made according to official regulations

14. TRANSPORT INFORMATION

Transport/Additional information:

Not classified as hazardous under any transport regulations.



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15. REGULATORY INFORMATION

National regulations, other regulations, limitations and prohibitive regulations

- o EC Classification : Not classified as dangerous for supply/use.
- o Hazard Symbol : Not applicable.
- o Risk Phrases : Not applicable.
- o Safety Phrases : Not applicable.

For any other specific regulatory compliance related information, please contact MRPL.

16. OTHER INFORMATION

The information provided in this Material Safety Data Sheet has been based upon the current level of information available, for the purpose of specifying the requirements regarding environment, health and safety in conjunction with the product. The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substances itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, MRPL do not assume responsibility and expressly disclaim liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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