



The Polyolefin Company (Singapore) Pte Ltd

Preparation Date : 30/01/1997

Revision Date : 01/07/2000

MSDS Ref No : BP-1

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product name : COSMOPLENE ® PP
Grades : AV161
Chemical name : Polypropylene (Block Copolymer)
Chemical formula : Basic structure of (C₃H₆)_n with blocks of ethylene - propylene copolymer
CAS No : 9010-79-1

2. COMPANY IDENTIFICATION

Manufacturer's name : THE POLYOLEFIN COMPANY (S) PTE LTD
Address : Office : 150, Beach Road #10-00 Gateway West.
Singapore 189720
Plant : 400/401 Pulau Ayer Merbau Singapore
Contact number (General information/Sales Enquiry) : (65) - 292 - 9622 (Office)

3. INFORMATION ON INGREDIENTS

<u>Component name</u>	<u>% by wt</u>	<u>CAS Reg No</u>
Ethylene-Propylene Copolymer	Approximately > 99%	9010-79-1
Additives	Approximately < 1%	Various



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MSDS Ref No : EP-1

4. HAZARD IDENTIFICATION

- Corrosive material : NO
- Explosive material : NO
- Flammable material : It burns easily under fire
- Reactive material : NO
- Toxic material : NO

5. FIRST-AID MEASURES

- Eye : If irritation develop, seek medical attention immediately.
- Skin : Pellet is inert and harmless. If irritation develop, seek medical attention immediately.
If in contact with hot molten resin, do not peel off the hot molten resin from skin, but flush with plenty of water (min 15 minutes) to cool down the thermal burned skin quickly and then seek medical attention immediately.
- Inhalation : If exposed to the thermal decomposition gas, remove the person from exposure to fresh air environment. If difficulty in breathing occurs, administer artificial respiration, followed by oxygen and seek medical attention immediately.
- Ingestion : If illness or adverse symptoms develop, seek medical attention immediately.

6. ACCIDENTAL RELEASE MEASURES

- Steps to be taken : Spilled pellet is a slipping hazard. Sweep up and discard. Keep out of water sources and sewers.
In case of molten resin spillage, cool it down with water and then dispose accordingly
- Personal protective equipment required : When handling molten resin , use thermal resistant gloves.



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7. FIRE FIGHTING MEASURES

- Suitable fire fighting agents : Water spray, foam , carbon dioxide, dry chemicals
- Precautions to be observed : Dense smoke and hazardous gases (Carbon monoxide and Carbon dioxide) will be emitted when it is burned without sufficient oxygen. Resin when melted will spread on the floor which it will catch fire easily.
- Protective clothing and breathing apparatus : Wear appropriate safety equipment for fire conditions (including positive pressure self contained apparatus (SCBA) and protective fire-fighting garments)

8. HANDLING AND STORAGE

- Handling : Wear appropriate personal protection equipment. Material is in solid form and is non-hazardous. No risk to the health of operators when handling at room temperature. During processing, avoid inhalation of the fumes and vapors.
- Storage condition : Store away from heat or flames. Have good housekeeping to prevent dust accumulation. Avoid contact with hot aromatic, chlorinated solvents and other hot strong oxidants.
- Ventilation : Workplace must be equipped with a good ventilation system and fume collector (if necessary)

9. PERSONNEL PROTECTION EQUIPMENT

- Eye protection : Use safety glasses.
- Respiratory protection : Use dusk mask.
- Skin protection : Normal clothing. When handling hot molten resin, wear thermal resistant hand gloves.



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10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Solid, opaque / translucent pellet
Odour	: Odourless
Boiling points	: Not applicable
Melting points / range	: 164 - 168 °C
Vapor pressure	: Not applicable
Vapor density	: Not applicable
Specific gravity (H ₂ O=1)	: 0.9 - 0.92
Solubility in water	: Not soluble
Solubility in other liquid	: Soluble in hot aromatic, chlorinated solvents
Viscosity	: Not applicable
PH	: Not applicable
Flash point	: Not applicable
Flammability limits	: Not applicable
Autoignition temperature	: Not applicable

11. STABILITY AND REACTIVITY

Stability	: Stable
Thermal decomposition temperature	: > 300 °C
Incompatible materials	: Hot aromatic, chlorinated solvents and hot strong oxidants
Conditions to avoid	: Not applicable
Hazardous decomposition product	: Carbon monoxide and carbon dioxide may be generated.
Hazardous polymerisation	: Will not occur



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12. OVER EXPOSURE AND TOXICOLOGICAL INFORMATION

- Route of entry and effect of over-exposure : Inhalation : Vapors produced are unlikely at room temperature (with reference to the physical properties).
Dust may produce irritation to the mucous membrane of the nose, throat and upper respiratory tract.
Skin contact : Essentially non-irritating but in contact with hot molten resin can cause severe burned.
Ingestion : May cause choking if swallowed. Resin itself is inert and harmless. Ingestion must be avoided.
- Acute effects : No known applicable information
- Chronic effects : No known applicable information
- Permissible exposure level : No known applicable information

13. ECOLOGICAL INFORMATION

- Biodegradability : No known applicable information
- Aquatic toxicity : No known applicable information
- Mobility : No known applicable information
- Bioaccumulative potential : No known applicable information

14. DISPOSAL CONSIDERATION

- Disposal method : Recover for reuse if possible. It may be buried on an authorized landfill site or be incinerated, however these disposal methods shall comply with the local authorities legislation.



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15. PACKAGING AND TRANSPORT INFORMATION

Type of packaging : Standard 25 Kg Resin bag or 650 Kg flexcon bag
Special transport requirement : Not applicable

16. REGULATORY INFORMATION

1. Under the **Singapore Standard 286** : Part 1 : 1984, Classification and Class Labels for Hazardous Substances, Section 3.1 , this product is NOT a "Hazardous Substance"
2. **OSHA HAZARD COMMUNICATION STANDARD**. This product is NOT a " Hazardous Chemical" as defined by the OSHA Hazard Communication Standard 29 CFR 1910.1200
3. This material has such quality as products made from polypropylene will, as long as it is used unmodified and processed according to standard manufacturing practices in the industries, comply with the U.S. FDA Regulation 21 CFR 177.1520 (C) 3.2 a.
Note : Direct food contact is subjected to the extraction provisions of the regulation on the finished food contact article.

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