

PRODUCT NAME: Rototuff Polyethylene

U.N. NO: None Allocated
HAZCHEM: None Allocated
PACKAGING GP: None Allocated
EPG: None Allocated
CLASS: None Allocated
POISONS SCHEDULE: None Allocated

PRODUCT IDENTIFICATION

Other names: Polyethylene, low density polyethylene (LDPE), linear low density polyethylene (LLDPE), linear medium density polyethylene (LMDPE), high density polyethylene (HDPE) in powder or granule form.

MOLECULAR FORMULA

-(CH₂CH₂)_n-

CHEMICAL CONSTITUTION

Polyethylene containing stabilisers, processing aids and pigments.

| Name | CAS Number | Proportion (%) |
|--------------|-------------|----------------|
| Polyethylene | See Below | 97 - 100 |
| Additives | Proprietary | 0 - 1 |
| Pigments | Proprietary | 0 - 2 |

Other Information

Applicable CAS numbers for Polyethylene may include:

CAS No. 25087-34-7 Ethylene/Butene-1 Copolymer
 CAS No. 25213-02-9 Ethylene/Hexene-1 Copolymer
 CAS No. 26221-73-8 Ethylene/Octene-1 Copolymer

PHYSICAL DESCRIPTION/PROPERTIES

| | | | |
|------------------------------------|----------------|----------------------------|----------------|
| Density (gm/cm ³) | 0.880 – 0.964 | Melting Point (°C) | 100-140 |
| Rel Vapour Density (air=1) | Not Applicable | Decomp. Point (°C) | >300 |
| Vapour Pressure (20°C) | Not Applicable | Sublimation Point | Not Applicable |
| Flash Point (°C) | Not Applicable | pH | Not Applicable |
| Flammability Limits (°C) | Not Available | Viscosity | Not Applicable |
| Auto-ignition Temp (°C) | >350 | Evaporation Rate | Not Applicable |
| % Volatile by Volume | Nil | Solubility in Water (gm/L) | Nil |
| Bulk Density (gm/cm ³) | 0.25 – 0.60 | | |

Appearance: White, neutral, black or coloured powders or granules
Odour: Odourless to mildly paraffinic
Solubility: Insoluble in water and organic solvents

HEALTH EFFECTS

This product is not classified as dangerous goods or a hazardous substance.

Acute Effects:

Short-term exposure by all routes is considered to be practically non-harmful. Exposure to the molten material will cause thermal burns. Additives and pigments present are at a low concentration and are encapsulated in the polymer.

Swallowed:

No adverse effects expected; however, large amounts may cause nausea and vomiting.

Eye:

May cause physical irritation to the eyes. Fumes given off during processing may cause eye irritation.

Skin:

Contact with powder may cause mechanical irritation. Exposure to molten material will cause burns and adhere strongly to the skin.

Inhaled:

Prolonged inhalation of dust may irritate the respiratory system. Prolonged inhalation of high doses of decomposition products can lead to headaches, or irritation in the respiratory system.

Chronic Effects:

No data found.

FIRST AID:

Rinse mouth with water. Seek medical advice if indicated.

Eye:

Irrigate with copious quantities of water for 15 mins. In all cases of eye contamination, it is a sensible precaution to seek medical advice. For contact with the molten material, treat as for skin burns.

Skin:

For skin burns, immediately flood burned area with plenty of water and cover with a clean, dry dressing. If molten material should contact the skin and adhere, cool quickly with running water – do not attempt to remove. Seek immediate medical assistance.

Excessive Inhalation:

Remove victim from exposure and loosen clothing – avoid becoming a casualty. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Advice to Doctor:

Treat symptomatically.

Toxicity:

Non Toxic. Additives present in the polymer are at levels unlikely to produce any untoward effect under industrial circumstances.

PRECAUTIONS FOR USE

Exposure Standards:

No value assigned for this specific material by the National Occupational Health and Safety Commission (Worksafe Australia).

Personal Protection:

If engineering controls and ventilation are not sufficient to prevent build-up of vapours or dust, wear safety glasses and a dust mask meeting the requirements of AS1715 and AS1716. Do not enter bulk storage silos or bins.

Wear thermal insulating gloves, full face shield, safety footwear and suitable overalls when handling melt or when there is a risk of being splashed with molten material.



Polyethylene MSDS

Flammability:

Combustible solid. The product burns, but is not classified as flammable. Dust-Air mixtures may be explosive.

HANDLING

Storage and Transport:

The products in this MSDS are not classified as dangerous goods for transport under the Australian Code of Dangerous Goods, including sea, rail, road and air. Prevent accumulation of dust. Do not allow spilled powder to Accumulate.

Spills:

Spilled powders are slippery underfoot. Avoid accidents, clean up immediately. Vacuum or sweep up spill, avoid generating dust. Collect and seal in properly labelled containers for disposal.

Environmental Hazard:

The product is not considered dangerous for the environment.

Disposal:

Refer to local land management authority. Normally suitable for disposal at approved land waste site. Also suitable for incineration by approved agent. Proper combustion does not require special exhaust technology.

Fire/Explosion Hazards:

Combustible. Can melt and flow in a fire situation. Accumulated powders or fine dusts may form an explosive air-dust mixture. Ground all material handling and transfer equipment to dissipate build up of static electricity and eliminate other sources of ignition.

On burning, carbon dioxide, carbon monoxide, waxes and a small amount of oxygenated hydrocarbons such as aldehydes, ketones and acrolein are emitted. Inhalation of these decomposition products may be hazardous.

Firefighters should use self-contained breathing apparatus.

Extinguishing Media:

Water fog or water spray, dry chemical, foam and carbon dioxide can be used. Avoid high pressure, direct water stream which may spread molten or burning resins.

INFORMATION

If information is required on pigments and additives contained in specific products, contact your **Rototuff** Polyethylene representative.

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