



PREFORM THERMOPLASTICS

MATERIAL SAFETY DATA

PRODUCT: DPI HOT MELT THERMO PLASTIC

Not Classified as Hazardous according to criteria of Worksafe Australia.

Identification

Product name: DPI Hotmelt Thermo Plastic.

Other names: Hotmelt Thermo Plastic Road marking material.

Grades: White Screed, White Spray, White Extrusion, Preform.

Product Use: Long life road marking for lane lines (Longitudinal) Stop Lines (Intersections) Car Park lines.

Product is pre melted to 200-230° C before application.

INGREDIENTS:

Chemical Entity	CAS	Proportions %
Resin (Synthetic Resins)	64742-161-1	16-19% Mass
Glass Beads	65997-17-3	20%
Plasticiser	NA	3-5%
Titanium Dioxide	3463-67-7	3-5%
Inert Extenders(Calcium Carbonate etc.)	1317-65-3	56-55%

Physical Data.

Appearance: Coarse white powder with pale yellow pellets

Softening Point: 101°C.

Flash Point: Higher then 230°C (open cup)

Vapour Pressure: Not Relevant.

Specific Gravity: 2 ± 0.2

Flammability: Not Relevant

Solubility in Water: Insoluble.



Other Properties: Binder (pale yellow pellets) is soluble in solvents such as Toluene, Xylene and most hydrocarbons.

Health hazard Information.

Health effects

Acute – Indigestion: **Powder form** – low toxicity, however ingestion should be avoided.

Acute – Eye: **Molten form** – harmful and must be avoided.

Powder form – direct contact may cause irritation. Aggregate may scratch eye surface when rubbed.

Molten form – will cause serious damage to eyes. Eyes must be protected at all times.

Acute – Skin: **Powder form** – slightly irritating upon direct contact. Low level of toxicity.

Molten form – will cause severe burns.

Acute – Inhalation: Powder form – nuisance dust of negligible hazard. Minimise inhalation and ensure good ventilation.

Chronic: There are reports in the literature of adverse health effects in workers arising from long periods of exposure to Thermo Plastic Road marking materials.

First Aid

Skin Contact

Powder form – wash the affected areas thoroughly with soap and water. DO NOT use solvents. Seek medical attention in the event of irritation.

Molten form – Same procedure as in the case of First Aid for eyes.

Eye Contact

Powder form – hold the eye open and flush immediately and continuously with sterile water until irritation stops. Ensure irritation under the eye lids by occasionally lifting the upper and lower lids.



Molten form – flush eyes immediately with copious quantities of cold sterile water to dissipate heat and contain injury. Do Not attempt to remove any fused thermo plastic material. Transport to Hospital or Doctor immediately.

Ingestion

Powder form – First Aid not normally required.

Molten form – Transport to Hospital or Doctor without delay.

Inhalation

Powder form – First Aid not normally required.

Molten form – First Aid not normally required for the inhalation of fumes .

Breathing

If necessary remove patient to fresh air, lay them down and keep warm and rested. If breathing is shallow or has stopped, ensure clear airways and commence EAR.

First Aid Facilities: Eye bath

Advise to Doctor: Non required

Precautions for use

Exposure Limits: Nuisance particular dust. TLV is 10mg/cubic metre for total dust.

Eng Controls: Use in well ventilated area. Ventilation may be required and equipment MUST BE explosion proof. Use away from ignition sources.

Personal Protection

Hot Melt Thermo Plastic Road marking material should not be used in its molten form by any body not formally trained in its safe handling.

Eye Protection: Use full face shield whilst loading and running pre heaters.

Skin Protection: Wear industrial safety boots. Impervious gloves with extended sleeves, gauntlet type MUST be worn.

Inhalation: Approved respiratory protection MUST be used when vapour or mist concentrations are unknown or exceed the Work-safe exposure Standards.



Flammability

Fire hazards: Powder form – Non Flammable.
When heating do not exceed the maximum safe heating temperature of 230° C as flash point is higher than 230° C

Fire / Explosion Hazards: Molten form – in the event of a fire in the pre-heater caused by overheating, fire will produce dense smoke, which may contain harmful gases of combustion. Immediately turn off the gas or heating source. Turn off agitator and extinguish flames using dry powder or CO2 fire extinguisher. DO NOT use water at any time, either to put out the fire or cool the pre heater. Leave pre heater open. Introduce more powder material in to the pre heater, if possible to assist in reducing overall product temperature. Allow to cool and do not drain off material until it has cooled below the maximum safe heating temperature.

Safe Handling Information

Storage: Thermo Plastic material should be stored safely and securely in areas not subject to excessive heat or contamination from fuels, oils and greases. It should also be protected from the weather and moisture. The presence of moisture in the material can cause foaming, spitting and expansion in the heater.

Transport: No other special precautions are required for transportation.

Spills and Disposal: Sweep up and dispose through normal disposal regulations for non hazardous solid waste. In the event of spillage in molten form, shut off spill, contain the spillage then allow to cool and solidify before disposal.