

KGM-125

Polyurethane Aliphatic Top Coat *Material Safety Data Sheet*



SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KGM-125
Chemical Name: Mixture (Urethane Polymer)
Chemical Formula: Not Applicable (Mixture)
Application: Waterproofing
Supplier: Krystol Group Pty Ltd
Unit 7, 60 Box Rd
Taren Point NSW 2229
Ph: 02 9524 6688

Emergency Contacts & Poisons Information Centre:
13 11 26 from anywhere in Australia,
0800 764 766 (New Zealand)

SECTION 2. COMPOSITION / INFORMATION OF HAZARDOUS INGREDIENT

Chemical Name	CAS NO.	Amount	Classification
Isophorone diamine	2855-13-2	0.5-4.0%	Xn; R21/22-R43
Xylene	1330-20-7	10-15%	F: R10, Xn: R20/21

Hazard Description: Xn: Harmful
Physical: Flammable liquids Category 1
Health: - serious eye damage/eye irritation Category 2
- repeated exposure Category 1 respiratory system

Risk Phrases:

R10: Flammable.
R20/21: Harmful by inhalation and in contact with skin.
R21/22: Harmful in contact with skin and if swallowed.
R43: May cause sensitisation by skin contact.

Safety Phrases :

S1: Keep locked up and out of reach of children.
S9: Keep container in a well ventilated place.
S16: Keep away from source of ignition. No smoking.
S23: Do not breathe gas/fumes/vapour/spray.
S25: Avoid contact with eyes.
S33: Take precautionary measures against static discharges
S62: If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

SECTION 3. HEALTH HAZARD INFORMATION

Toxological:	Not available. Refer to individual constituents. Flammable.
Skin Contact:	Harmful in contact with skin. May cause sensitisation by skin contact. Wear protective gloves for protection. Wash hands.
Eye Contact:	Causes serious eye damage/eye irritation (Category 2)
Ingestion:	Harmful if swallowed.
Inhalation:	Harmful by inhalation and in contact with skin. Hazard if there is repeated exposure to the respiratory system (Category 1). May cause drowsiness and dizziness. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Only use outdoors or in a well-ventilated area.

SECTION 4. FIRST AID MEASURES

Eyes:	Immediately irrigate with copious quantity of clean water for at least 15 minutes. Hold eyelid open to flush product from under lid. Seek immediate medical assistance.
Skin Effects:	Properly wash with soap and water. and rinse thoroughly. Remove contaminated clothing and wash before re-use. If swelling, redness, blistering or skin irritations occur/ persists then seek medical advice.
Inhalation:	Remove patient from exposure and supply fresh air. Remove contaminated clothing. Keep patient warm and comfortable. Keep at rest until fully recovered. Ensure airways are clear. If breathing is laboured or cyanotic (blue), have a qualified person give oxygen through face mask. If breathing has stopped or is difficult, give immediate artificial respiration and apply external cardiac massage. Seek immediate medical advice. Exposed person may need medical surveillance for 48 hours.
Ingestion:	If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Avoid giving milk or oils. Avoid giving alcohol. If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus. Seek medical advice.
Doctor Advice:	Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. For acute or short term repeated exposures to xylene: Gastro-intestinal absorption is significant with ingestions. For ingestions exceeding 1-2 ml (xylene)/kg, intubation and lavage with cuffed endotracheal tube is recommended. The use of charcoal and cathartics is equivocal. Pulmonary absorption is rapid with about 60-65% retained at rest. Primary threat to life from ingestion and/or inhalation, is respiratory failure. Patients should be quickly evaluated for signs of respiratory distress (e.g. cyanosis, tachypnoea, intercostal retraction, obtundation) and given oxygen. Patients with inadequate tidal volumes or poor arterial blood gases ($pO_2 < 50$ mm Hg or $pCO_2 > 50$ mm Hg) should be intubated. If patient has been subject to severe exposure then the patient should be kept under medical supervision for at least 48 hours.

SECTION 5. FIRE FIGHTING MEASURES

- Flammability: 1.1-7.0%
- Flash Point: 28°C (Xylene)
- Extinguishing Media: Sand, dry agent (carbon dioxide, dry chemical powder). Do not use water.
- Fire Fighting Measures: Product is flammable. Product contains flammable solvents. Containers may rupture or explode if subjected to high intensity heat. Vapours form explosive mixture with air. Keep containers cool with water spray to prevent expansion and possible rupture. If safe to do so, remove containers away from heat source or fire. Burning may produce a dense and irritating smoke or fumes.
- Special Protective Equipment: Self contained breathing apparatus should be used, with full protective gear.
- Specific Hazards: Hazardous combustible product (liquid). Combustion products may include carbon dioxide, carbon monoxide, O₂ nitrogen oxides (NO, NO₂) other pyrolysis products typical of burning organic material. Due to reaction with water-producing CO₂, a hazardous build up of pressure could result, leading to possible rupture if containers are re-sealed. Container may burst if over-heated.

SECTION 6. ACCIDENTAL RELEASE (SPILL OR LEAK) PROCEDURES

- Spills & Disposal:
- Clear area of personnel.
 - Avoid breathing vapours, provide adequate ventilation.
 - Extinguish and remove all sources of ignition. Avoid sparks.
 - Cleaners should wear protective gear including face mask or goggles, safety boots, gloves and overalls.
 - Note: Product dries quickly in thin films and should therefore theoretically minor spills should easily be confined.
 - Prevent product from entering drains and waterways.
 - Cover and contain with soil, sand or absorbent material.
 - Shovel product into open drums. Allow product to cure before closing.
 - Dispose of cured product into land-fill in accordance with regulations.
- Personal Precautions: This information assumes a large spill:
Clear & ventilate area. Wear full protective gear to prevent skin and eye contact and inhalation of vapours. Wear breathing apparatus. Prevent run off from entering water ways and drains. Cover with wet soil or wet sand. Let material react for 10 minutes. Shovel in to open containers. Dispose to chemical waste bin and dispose in accordance with national laws.
- Environmental Precautions: The product will naturally cure on contact with air and water.

SECTION 7. HANDLING AND STORAGE

- Storage Temp.: 15-30°C
- Shelf Life: Twelve months at 25°C
- Special Sensitivity: If container is exposed to high heat, it can be pressurised and possibly rupture.
- Handling/ Storage Precautions: Store in cool, dry area away from water, alcohols, amines, acids, bases alkalis, corrosive chemicals, oxidising agents, heat sources, direct sunlight and foodstuffs. Keep dry. Product reacts with air and can lead to container pressurisation and possible rupture. Ideal storage temperature is 23°C. Check regularly for leaks. Containers, even those that have been emptied, may contain explosive vapours. Do NOT cut, drill, grind, weld or perform similar operations on or near containers. DO NOT allow clothing wet with material to stay in contact with skin. Electrostatic discharge may be generated during pumping - this may result in fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (<=1 m/sec until fill pipe submerged to twice its diameter, then <= 7 m/sec). Avoid splash filling. Avoid all personal

contact, including inhalation. Wear protective clothing when risk of overexposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps where vapours may be trapped.

Storage Incompatibility: May ignite or explode in contact with strong oxidisers, 1,3-dichloro-5,5dimethylhydantoin, uranium fluoride. May attack some plastics, rubber and coatings. May generate electrostatic charges on flow or agitation due to low conductivity. Segregate from alcohol and water, avoid reaction with oxidising agents.

SECTION 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Exposure Controls:	Chemical Entity	Tlv/Twa (mg/m ³) 8 hrs	Stel (mg/m ³) 15 mins
	Xylene (o-, m-, p- isomers)	350	655
	m-tolylidene diisocyanate	0.02	0.07

Exposure limits with "skin" notation indicate that vapour and liquid may be absorbed through intact skin. Absorption by skin may readily exceed vapour inhalation exposure. Symptoms for skin absorption are the same as for inhalation. Contact with eyes and mucous membranes may also contribute to overall exposure and may also invalidate the exposure standard.

Ventilation: Ensure ventilation is adequate to keep air concentrations below Exposure Standards. Vapours are heavier than air and may collect in low lying areas. Do not enter confined areas where vapours may have collected. Keep containers closed when not in use. Keep away all sources of ignition.

Respiratory Protection: Product is generally rolled and hence product is not atomised. Therefore, use in well ventilated areas should suffice. However, use air mask with positive air flow should be used in areas where ventilation is inadequate. Type A Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent).

Eye Protection: Face shield or goggles to avoid splashes, mist and dust.

Hand Protection: Neoprene, Nitrile & PVC gloves (long). Refer to Australian / New Zealand AS/NZ 2161.1:2000 for guidance on selection of protective gloves.

Footwear: Boots or safety foot wear.

Body Protection: Overalls. Remove soiled or soaked clothing immediately.

Hygiene Measures: Observe common sense and good industrial practices.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Colour:	Clear	Sol./Miscibility with Water:	Not miscible
Form:	Liquid	Odour:	Characteristic
pH:	Not available	Boiling Pt:	No data available
Specific Gravity:	1.00 ± 0.03 gr/ml	Flash point:	65°C
VOC:	< 250 g/l		

SECTION 10. STABILITY AND REACTIVITY

Stability data: Not explosive however formation of explosive air/vapour mixtures is possible.

Incompatibility: No dangerous reactions known.

Hazardous Decomposition: No dangerous decomposition products known at room temperature

Polymerisation: No data available.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity Data:	The product is not harmful to health provided the product is used correctly.
Irritant Effect:	Irritant to skin and mucous membranes. Irritating effect on eyes. Vapours if inhaled in high concentration may have narcotic effects. Prolonged contacts may cause irritation to the skin and give sensitisation and there is a risk of reduction of human fertility.
Disposal:	This material and its container must be disposed of in accordance with local authority requirements.

SECTION 12. ECOLOGICAL INFORMATION

Precautions:	Hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even small quantities leak into the ground.
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SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal:	Refer to State Land Waste Authority. Empty containers must be de-contaminated. Protect spillage from entering soil, waterways, drains and sewers. Dispose of products via a licenced waste disposal contractor.
Environmental:	Avoid contaminating water ways. Mobility: By considering the production and use of the product, it is unlikely that significant environmental exposure in air and water will arise. Immiscible with water, but will react with water to produce inert non-bio-degradable solids. Conversion to soluble products including diamino-diphenylmethane (MDA) is very low under normal laboratory conditions of good dispersion and low concentration. In air, the predominant degradation process is predicted to be relatively rapid OH radical attack, by calculation and by analogy with related diisocyanates.

SECTION 14. TRANSPORT INFORMATION

UN/NA Number:	1263
Technical Shipping Name:	Paint
Packaging Group:	III (minor danger)
Product Label:	Product label established
Hazard Class:	3
Sea Transport:	UN Number: 1263 Packing Group: III EMS Number: F- E, S- E
Air Transport:	UN/ID Number: 1263 Packing Group: III Class: F1 Risk No. 33

SECTION 15. REGULATORY

Labelling in accordance with directives CLP and 1999/45/EC

Risk Phrases:

R10: Flammable.

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SECTION 16. OTHER INFORMATION

This document provides a complement to the product use instructions but does not replace them. The information is based on our current knowledge of the product concerned at the date of drafting. That information is given in good faith and does not remove from the user his/her duty to be aware of and to follow all legal regulations and statutes covering his/her activities. The user takes sole responsibility for the application of safety measures covering the use of the product he/she is aware of. We also draw the user's attention to any use of the product for which it was not designed.

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