

# KGM-100

## Single Component Polyurethane Membrane Material Safety Data Sheet



### SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: KGM-100  
Chemical Name: Mixture (Polyurethane Prepolymer)  
Chemical Formula: Not Applicable (Mixture)  
Application: Waterproofing  
Supplier Name: Krystol Group Pty Ltd  
Unit 7, 60 Box Rd  
Taren Point NSW 2229 Australia  
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 INGREDIENTS

Chemical Name	CAS NO.	EINECS No.	Conc. (% w/w)	Classification
m-Tolylidene diisocyanate	26471-62-5	247-722-4	0.1-1%	Xn: R20-R42
Xylene	1330-20-7	215-535-7	1-10%	F: R10, Xn: R20/21

Hazard description: Xn: Harmful  
R10: Flammable (Category 1),  
R20/21: Harmful by inhalation and in contact with skin- serious eye damage/irritation (Category 2) (H319)  
R42: May cause sensitisation by inhalation - respiratory system (Category 1)

### SECTION 3. HEALTH HAZARD INFORMATION

Potential Health Effects:

Primary Routes of exposure: Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be route of entry for liquefied gases.

Human Effects and Symptoms of Overexposure:

Skin Contact: Some components used in this material are reported to cause severe irritation and will probably irritate human skin. Skin sensitisation and irritation may develop after repeated and/or prolonged contact with human skin.

Eye Contact: Some components used in this material are reported to induce chemical burns in rabbit eye studies; a similar degree of eye injury may develop after contact with human eyes.

Skin absorption: Systemically toxic concentrations of this product will probably not be absorbed through human skin.

Ingestion: Irritation of chemical burns of the mouth, pharynx, oesophagus and stomach can develop following ingestion.

### SECTION 3. HEALTH HAZARD INFORMATION CONT'D

- Inhalation: Vapours can irritate eyes, nose and respiratory passages and may cause drowsiness & dizziness. Severe overexposure may induce respiratory sensitisation with asthma-like symptoms. Symptoms include chronic cough, tightness of chest with difficulty breathing. These symptoms may be immediate or delayed up to several hours after exposure. There are reports that chronic exposures may result in permanent decreases in lung function. ACUTE - Exposure may cause mucous membrane and respiratory tract irritation, tightness of chest, headache, shortness of breath and a dry cough. At concentrations exceeding current occupational limits and for sensitised individuals at levels less than or greater than current occupational limits, asthma-like symptoms may occur. These symptoms may include coughing, wheezing and shortness of breath. Hypersensitive pneumonias may also occur if the person is sensitised. This syndrome is characterised by fever, non-productive cough, wheezing, chills and shortness of breath. The effects of acute exposure may be delayed in onset up to 12-24 hours. CHRONIC - Repeated exposure above current occupational limits may cause an allergic sensitisation of the respiratory tract. This is characterised by an asthma-like response upon exposure to the chemical. The symptoms may include coughing, wheezing, shortness of breath and chest tightness, and may be fatal.
- Medical Conditions Generally Aggravated By Exposure: Cardiovascular disease, Asthma or Asthmatic Bronchitis, allergic disease, chronic respiratory disease, sinusitis, headache, dizziness.

### SECTION 4. FIRST AID MEASURES

- Eye contact: Immediately flush eyes with plenty of water. After initial flushing, remove glasses and contact lenses and continue flushing for at least 15 minutes. Have eyes examined and treated by medical personnel.
- Inhalation: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is laboured, give oxygen. Consult medical personnel
- Skin contact: Wash material off the skin with plenty of soap and water. If redness, itching, or a burning sensation develops, get medical attention. Wash contaminated clothing and decontaminate footwear before reuse.
- Ingestion: Do not induce vomiting. Give 1 or 2 glasses of water to drink and refer person to medical personnel. (Never give anything by mouth to an unconscious person).
- Respiration: Vapours can irritate eyes, nose and respiratory passages. Severe overexposure may induce respiratory sensitisation with asthma-like symptoms. Symptoms include chronic cough, tightness of chest with difficulty in breathing. These symptoms may be immediate or delayed up to several hours after exposure. There are reports that chronic exposures may result in permanent decreases in lung function. Use only outdoors or in a well-ventilated area.

### SECTION 5. FIRE FIGHTING MEASURES

- Extinguishing media: Use CO<sub>2</sub>, sand or dry chemical extinguishing media. Do not use water.
- Specific fire and explosion risks: Use air-supplied rescue equipment for enclosed areas. Cool exposed containers with water spray. Avoid breathing vapour or fumes.
- Fire fighting procedures: Fire-fighters should be equipped with self-contained breathing apparatus and turn out gear.

### SECTION 6. ACCIDENTAL RELEASE (SPILL OR LEAK) PROCEDURES

- General: Evacuate and ventilate spill area, dike spill to prevent entry into water system, wear full protective equipment including respiratory equipment during clean up. Absorb with sand/earth and dispose to chemical waste bin.
- Major spill: Transfer as much liquid as possible via pump or vacuum device into closed but not sealed containers for disposal in accordance with national legislation.

## SECTION 7. HANDLING AND STORAGE

Storage Temp.: 15-35°C  
Shelf Life: Six 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 tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected. Avoid contact with skin and eyes. Use only in well ventilated areas.

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Limits:

Chemical Name	CAS NO.	TLV/TWA (mg/m <sup>3</sup> )	Stel (mg/m <sup>3</sup> )	TWA (ppm)	Stel (ppm)
m-Tolylidene diisocyanate	26471-62-5	0.02	0.07		
Xylene	1330-20-7	350	655	80	150

Clothing: Rubber gloves, coveralls, hardhat, boots and rubber apron to avoid skin contact. Contaminated equipment or clothing should be cleaned after each use or disposed of. Wash hands before breaks and after work.

Eyes: Wear fitted chemical goggles or face shield and safety glasses.

Respiration: For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), select and use an appropriate positive pressure air supplying respirator (airline or self-contained breathing apparatus). When atmospheric levels may exceed the occupational exposure limit (PEL or TLV), approved air-purifying respirators equipped with an organic vapour sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.

Ventilation: Use local exhaust as necessary to maintain P.E.L.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Colour:	Grey	Soluble/Miscible In Water:	Not miscible
Form:	Liquid	Viscosity:	2,500 - 3,500 Cps
Odour:	Mid	pH:	Not available
Odour Threshold:	Not Established	Boiling Pt:	No data available
Specific Gravity:	1.34 ± 0.03 (@25°C)	VOC:	< 300g/L
Flash point:	65°C		

## SECTION 10. STABILITY AND REACTIVITY

Stability Data: Stable.

Incompatibility: No dangerous decomposition if used according to specifications.

Hazardous Decomposition Products: No decomposition if used according to specifications.

## SECTION 11. TOXICOLOGICAL INFORMATION

Eye Effects: Eye irritation may develop after contact with human eyes.

Skin Effects: Repeated or prolonged single exposure may cause irritation to the skin and mucous membranes. May cause a cutaneous allergic reaction in predisposed individuals. It appears unlikely that any danger is attached to absorption of quantities of the product through the skin following prolonged single exposure.

Inhalation: This product contains Xylene. High vapour/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anaesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death. Negligible hazard at ambient temperature (-18° to 38° C)

Ingestion: This product contains Xylene. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. Low order of toxicity.

Sensitisation: Sensitisation is possible through inhalation and skin contact.

General information: Vapours in high concentration may have narcotic effects if inhaled. Prolonged or repeated contacts may cause irritation to the skin and give sensitisation and there is risk of reduction in human fertility.

## SECTION 12. ECOLOGICAL INFORMATION

General: Water Hazard Class 2: 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.

## SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: Incinerate or landfill in a licensed facility. Do not discharge into waterways or sewer systems. Waste must be disposed of according to country and local law.

Container Disposal: Steel drums must be emptied (as defined by RCRA, Section 261.7 or state regulations that may be more stringent) and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer, or an approved landfill. Check with reconditioner to determine if they require them to be decontaminated. Drums destined for a scrap dealer or landfill must be decontaminated and punctured or crushed to prevent reuse.

## SECTION 14. TRANSPORT INFORMATION

UN/NA Number: 1263  
Technical Shipping Name: Paint  
Packaging Group: III (minor danger)  
Hazard/Class: 3  
Air transport risk: 3  
Air transport class: F1

## SECTION 15. REGULATORY INFORMATION

Labelling in accordance with CLP and EC (1999/45):

Risk Phrases: R10: Flammable  
R20/21: Harmful by inhalation & in contact with skin  
R42: May cause sensitisation by inhalation

Safety Phrases: S 1/2: Keep locked up & out of reach of children  
S-9: Keep container in a well ventilated place  
S-16: Keep away from source of ignition. No smoking.  
S-23: Do not breathe vapours  
S-25: Avoid contact with eyes  
S-33: Take precautionary measures against static discharges  
S-62: If swallowed, do not induce vomiting. Seek medical advice immediately and show this container or label.

## 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 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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END OF DATA SHEET