

# KGM-100

## Single Component Polyurethane Membrane Technical Data Sheet



### Description

KGM-100 is a single component, moisture curing polyurethane membrane, which is coated over surfaces to form a seamless watertight finish.

When particular membrane molecules come in contact with moisture, KGM-100 cures to produce a solid but highly flexible material that will provide you with dependable waterproofing protection.

### Uses

KGM-100 has a wide range of uses and is designed to waterproof most non-exposed external wet areas for above and below ground construction.



### Typical Areas of Application

- Retaining Walls
- Planter Boxes
- Balconies
- Non-Exposed Roof Decks
- Elevator pits and Equipment pits
- Detention Tanks
- Tunnels, underground vaults, etc

### Advantages

- Highly flexible Class III membrane
- Fast curing
- No mixing required
- No complicated detailing
- Seamless waterproof system
- Can be easily repaired when damaged
- Bitumen free – no leaching
- Good resistance to chemicals
- High strength and puncture resistance
- Conforms easily to irregular surfaces
- Excellent adhesion to porous surfaces

### Design Criteria

All works must be carried out as per Australian Standards AS 4654: 2009.

Special consideration is needed with every application of waterproofing. For applications not listed above, please contact your nearest KGM supplier for a project specific recommendation.

### Physical Properties

Form:	Elastomeric liquid
Colour:	Blue
Elongation:	> 500%
Hardness (Shore A):	70 ± 5
Tensile strength:	> 25kg/cm <sup>2</sup>
Tear resistance:	> 15kg/cm
Specific gravity ASTM D-71:	1.40 ± 0.05
Solid content (%):	92 ± 2
Tack-free time:	3 > hours @ 25°C/80%RH
Curing/Recoat Interval:	24 hours @ 25°C/80%RH
Flash point (closed cup):	> 29°C
Packaging:	22kg / 15ltr bucket
Clean up:	Xylene or Solvent

## Application Instructions

1. Prep work - surfaces must be made good and should be sound, stable, dry, clean and free from contaminants.
2. Priming - over porous surfaces, use a water-based epoxy primer such as KGM-500. This primer can also be used on wet surfaces or over existing membranes. For general priming, use KGM-425 primer. For plastic or metal surfaces, use general purpose etching primers.
3. Joint Sealing – use a flexible polyurethane sealant to seal wall/floor joints as per manufacturer’s recommendations. Fillet must extend at least 12mm onto adjacent surfaces. Construction joints should be sealed using the same method.
4. Additional Detailing – large cracks and expansion joints should be routed to form a ‘V’, and then filled with sealant slightly proud of surface. For added protection, polyester bandage can be imbedded into the first coat of membrane over these large cracks or expansion joints minimum 100mm wide.
5. Membrane Coating – do not thin product down. Apply KGM-100 liberally to surface area by brush, roller or squeegee. Ensure no air pockets are formed by back rolling or lightly combing the wet surface. Consumption should be no less than 1.5ltr/m<sup>2</sup>, with a minimum of two coats. Allow 24 hours between coats.



## Coverage

One bucket will cover 10m<sup>2</sup> for two coats, or 20m<sup>2</sup> for a single coat.

## Safety

Before using or handling materials, please read all relevant Material Safety Data Sheets (MSDS). KGM-100 may cause sensitivity, avoid contact with skin and eyes. Wear suitable gloves and eye/face protection. Use only in well ventilated areas. Product is flammable so ensure ignition sources are kept well away from product and vapours.

## Storage

KGM-100 can be stored unopened for 6 months in a cool, dry place below 25°C. Avoid exposure to humidity or temperatures above 50°C for extended periods. Product is sensitive to air, therefore opened containers must be used immediately.

## Limitations

- Do not apply when air temperature is below 10°C and above 32°C.
- Product is not designed for long term UV exposure or foot traffic.
- Do not apply product directly onto damp surfaces.
- Do not thin product in any form.

## Warranty

The seller warrants that at the time of shipment its products are free from manufacturing defects and, when applied in accordance with the current specification and application instructions, will perform as so stated in its product literature. Project specific warranties are available on request. Please consult your nearest distributor for further information.

## Product Disclaimer

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standard, our instructions and recommendations are only for the uses they are intended. KGM Australia does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product. We also reserve the right to update information without prior notice to reflect ongoing research and development programs. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with any relevant items.

## Technical Support

For any additional information not expressed in this document, please contact us via the details below.