


EPO-KEM PRODUCT DATA SHEET

EPOFLEX 100

Two component, elastomeric waterproof membrane (revised 9-7-01)

DESCRIPTION	<p>EPOFLEX 100 is a two component polyurethane material based on highly reactive solvent-free resins and curing agents. EPOFLEX 100 is formulated to be highly elastic, waterproof and have very short curing times.</p>																																											
FEATURES	<p>When mixed, applied and cured correctly, EPOFLEX 100 has the following features:</p> <ul style="list-style-type: none"> • Highly and permanently elastic • Short curing time • Crack bridging • Water tight • Seamless • High mechanical strength • Resistant to alkaline conditions • Retains mechanical properties at temps from -20°C to +80°C and short incidental loads with even higher temps e.g. during application of hot-mix asphalt. 																																											
USES	<p>EPOFLEX 100 is a liquid spray applied waterproof membrane with some unique physical properties. It is a firm and tough product with highly elastic properties that allow it to stretch and maintain cover to cracks and joints. EPOFLEX 100 is suitable for coating parking decks, bridges, basins, tanks, silos and pipelines for example. Due to its' short curing time it is easy to apply high builds on walls, ceilings and other vertical surfaces without difficulty.</p>																																											
FINISH	<p>Black, grey or cream in colour. Smooth, silk-glossy appearance when cured. May be top-coated with a variety of EPO-KEM polyurethane products to create the desired surface finish, texture and colour.</p>																																											
THICKNESS	<p>Minimum of 2mm and any greater thickness. An optimum thickness is determined by design considerations which include the profile of the substrate and the crack bridging ability and ultimate elongation required. Generally, the thickness of EPOFLEX 100 and the speed of movement (expansion & contraction) will both effect its' ultimate elongation and ability to bridge cracks.</p>																																											
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Supplier:

Epo-Kem Industries Pty Ltd ABN 66 119 228 438
 22 Brooke Ave, Southport, QLD 4215
 AUSTRALIA

PHONE: +61 7 5532 4690
 FAX: +61 7 5591 5559
 E-MAIL: info@epo-kem.com

www.EPO-KEM.com

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CHEMICAL RESISTANCE	<i>EPOFLEX 100</i> has good resistance to dilute acids and alkalis, water, salt water and waste water. It has excellent hydrolysis resistance. Exposure to oils and aliphatic hydrocarbons may cause slight swelling. It is not resistant to organic solvents.						
BASES (substructures)	<p>CONCRETE: Must be clean, completely dry, free from grease and be aged for a minimum of 28 days. New concrete must be a minimum of 20mPa and be finished by steel trowel followed by a light brooming to promote good bonding. Sand/cement screeds must adhere firmly to the substrate.</p> <p>STEEL: Must be completely free of grease, oils, rust and scale. Grit blast in accordance with SA 2.5. Apply a coat of Primer PULP 2581 within 4 hours of grit blasting.</p> <p>Wood and hot-mix asphalt bases must be free from grease, clean and dry.</p> <p>This information is not intended to be exhaustive, but bases must be designed with these requirements included. Other design considerations are drainage, edge and joint detail. EPO-KEM document “SPECIAL CONDITIONS FOR FLOOR SUBSTRUCTURES” should also be consulted.</p>						
INSTALLATION	<p>SURFACE PREPARATION: Check new base is constructed to minimum requirements as above. Base should be clean and free from contamination. Always carry out an adhesion test before proceeding with installation. Old concrete should be mechanically prepared by e.g. shotblasting or grinding to remove cement laitance and any contamination. Concrete bases require special care due to their slightly porous nature and tendency to cracking. Prime dry surface with EPO-KEM PRIMER GVM/S by roller or spray using 15 – 25kg for every 100m² of surface area. Broadcast wet primer with clean dry quartz sand. Hot-mix asphalt must be aged for 14 days minimum and low pressure dust blasted to expose the mineral aggregate. Prime with EPO-KEM PRIMER EW.</p> <p>REPAIRS: An expert must do any repairs needed on a concrete base.</p> <p>APPLICATION: EPOFLEX 100 must be installed by a competent specialist contractor approved by EPO-KEM. EPOFLEX 100 can only be applied with plural component hot airless spray equipment. It is mixed in the spray gun. Thorough mixing of the two components is essential. The material is extremely reactive. During application ambient temperature should be between 8° and 40°C, although temperatures down to 0°C are also possible. Relative humidity must not exceed 80%. The surface temperature must be greater than 3°C above the measured dewpoint. Apply a minimum of two layers to eliminate pinholes. Each layer should be applied within 4 hours of the previous layer. Longer delays will demand that the surface is primed with EPO-KEM PRIMER PU/H to improve adhesion.</p>						
DILUTION	None permitted.						
COVERAGE	<table style="width: 100%; border: none;"> <tr> <td style="width: 60%;">EPO-KEM PRIMER GVM/S</td> <td style="text-align: right;">0.15 – 0.25 kg per m²</td> </tr> <tr> <td>EPO-KEM PRIMER PU/H</td> <td style="text-align: right;">0.1 – 0.15kg per m²</td> </tr> <tr> <td>EPOFLEX 100</td> <td style="text-align: right;">1.1 kg per mm thickness per m²</td> </tr> </table> <p>* OPTIONAL Topcoats Refer to EPO-KEM</p>	EPO-KEM PRIMER GVM/S	0.15 – 0.25 kg per m ²	EPO-KEM PRIMER PU/H	0.1 – 0.15kg per m ²	EPOFLEX 100	1.1 kg per mm thickness per m ²
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CURING	Full cure will depend on the ambient temperature and relative humidity of the prevailing conditions. Full cure is obtained after 24 hours in most conditions.						
SAFETY	When mixing and applying any of the above-mentioned products, provide adequate ventilation. Users should avoid spillages and contact with skin or eyes. An MSDS (material safety data sheet) is available for each component and should be consulted before use. Clean up of both tools and skin is possible with warm soapy water prior to the product curing.						

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