

# Technical Data Sheet

## Emer-Seal PU

**Flexible, one-component, polyurethane joint sealant**

### USES

Sealing joints in concrete panels, fibrous cement products, external cladding panels, blockwork and brickwork. Also in sealing joints around aluminium and timber door and window frames and between metal. Also suitable for sealing sawn joints up to 10 mm wide in concrete floors and pavements.

### ADVANTAGES

- Primerless adhesion to concrete, timber, masonry, bricks, aluminium, metal and ceramics
- \*Paintable with water based acrylic paints
- Neutral cure - will not corrode metals
- Low odour
- Low slump - suitable for wide vertical joints

\* May cause staining of acrylic paints. Test compatibility of paint before application.

### DESCRIPTION

Emer-Seal PU is an elastomeric joint sealant based on polyurethane technology. Emer-Seal PU uses a neutral cure system reacting on exposure to atmospheric moisture. When cured it forms a waterproof and durable seal, which makes it ideal for exterior applications. The slower skinning formulation of Emer-Seal allows long joints to be sealed without premature skin formation, particularly in warm, humid weather.

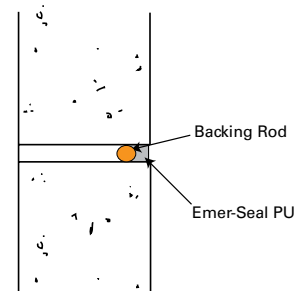
### TECHNICAL SUPPORT

Parchem also offer a technical support package to specifiers and contractors which includes on-site, technical advice from staff experienced in the construction industry.

### DESIGN CRITERIA

Emer-Seal PU may be applied in joints between 5 mm and 50 mm wide. All moving joints should be designed to an optimum width to depth ratio of 2:1, with a minimum joint size of 5 mm wide by 8 mm deep for porous surfaces or 5 mm wide by 5 mm deep for non-porous surfaces.

Sealing joints in concrete and other masonry surfaces



### PROPERTIES

Data quoted are typical for this product but do not constitute a specification.

<b>Form:</b>	Smooth, non-slump paste
<b>Colour:</b>	Concrete Grey
<b>Movement accommodation factor:</b>	+/- 25% (total 50%)
<b>Skinning time:</b>	90-150 mins at 23°C, 50% RH
<b>Cure speed:</b>	3 mm / 24hr @ 23°C 50% RH
<b>Typical hardness Shore 'A' (ISO 868):</b>	25 +/- 5
<b>100% Modulus (ISO 8339):</b>	0.30 MPa
<b>Elongation at break:</b>	>600%
<b>Chemical resistance to occasional spillage:</b>	Good resistance to dilute acids and alkalis
<b>Continuous service temperature range:</b>	- 30°C to + 80

### MAINTENANCE

There are no special requirements, however, any damage found during routine inspections should be cut out and replaced.

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**Emer-Seal**

<b>PARCHEM</b>	CONCRETE REPAIR	FLOORING	<b>JOINTING SYSTEMS</b>	WATERPROOFING
<b>TECHNICAL DATA SHEET</b>	<b>MARCH 2010</b>			
<b>www.parchem.com.au</b>	<b>7 Lucca Road, Wuyong NSW 2259</b>	<b>Sales 1800 624 322</b>	<b>Technical 1800 812 864</b>	<b>ABN 80 069 961 968</b>

## SPECIFICATION CLAUSES

Where so indicated on the drawings, joints are to be sealed using Emer-Seal PU, a one part polyurethane joint sealant as supplied by Parchem. The sealant must be capable of +/- 25% joint movement, have an elongation at break (ISO 8339) of greater than 600%, Shore A hardness of 25 and an elastic modulus at 100% elongation (ISO 8339) of 0.30 MPa.

Joints must be prepared and primed where required in accordance with the current technical data sheet.

The product manufacturer must be accredited to ISO 9001. The sealant and associated materials must be installed by a contractor nominated by the supplier.

## APPLICATION INSTRUCTIONS

### PREPARATION

The joint surfaces must be thoroughly dry, clean and frost free. Remove all dirt, laitance, loose materials and foreign matter. Remove all rust, scale and protective lacquers from metal surfaces. Non-porous surfaces should be degreased using Solvent 10.

In all joints a bond breaker must be used to prevent sealant contact with the back of the joint, to allow optimum sealant performance.

In shallow joints self-adhesive polyethylene tape can be used.

Deep joints should incorporate a backing strip such as Expandafom or Stiffjoint to support the sealant while also acting as a bond breaker.

### PRIMING REQUIREMENTS

Good adhesion can be gained to clean, dry, uncontaminated concrete, timber, metals, ceramics, brickwork and most coating surfaces without the use of primers. On some surfaces however, adhesion may be improved by the use of a primer. Where doubt exists over the suitability of the substrate for unprimed adhesion, site trials should be conducted in conjunction with priming advice from Parchem. In most applications optimum adhesion to concrete and other porous materials can be achieved using Primer 21. Primer 13 must be used on concrete in applications subject to semi-permanent or long term water immersion. On non-porous materials such as metals, Primer 4 or Primer 6 is recommended.

## GUN LOADING

Emer-Seal PU is applied using a suitable sealant gun. Insert the sachet into the gun, cut a slit in the top of the sachet, replace the end cap and apply the sealant.

## APPLICATION

Extrude the sealant firmly into joint to ensure complete contact with joint faces. Tool the sealant into the joint. Smooth finish if necessary with a spatula wetted with a dilute detergent solution.

## CLEANING

Clean tools immediately after use with Solvent 10.

## LIMITATIONS

Do not apply Emer-Seal PU to bituminous surfaces or allow bitumen to contact Emer-Seal PU.

## ESTIMATING

**Supply:** 600 ml foil sachet, cartons of 20

**Coverage:** On average one 600 ml sachet will supply 12 metres of 10 mm x 5 mm sealant bead

## STORAGE

Shelf life 6 months. Store in a cool dry place.

## IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the MSDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 11 26 within Australia) or a doctor for advice.

## PRODUCT DISCLAIMER

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

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