

SOLVENTLESS EPOXY FOR ROAD REPAIR

EPAR 121B

TECHNICAL DATA

1.0 DESCRIPTION

EPAR 121B is a solventless liquid epoxy which has very good mechanical strength, good chemical resistance and excellent flexibility.

EPAR 121B adheres very well to concrete, metal and asphalt.

2.0 PHYSICAL PROPERTIES:

2.1	Viscosity	low – easily poured liquid.
2.2	Mix Ratio	1 : 1 by volume or 1.1 (resin) : 1.0 (hardener) by weight.
2.3	Pot Life	25 minutes at 20°C for 100 g.
2.4	Minimum Application Temp.	0°C.
2.5	Shelf Life	1 year in original unopened containers.
2.6	Cured Properties (7 days cure at 23°C unless stated otherwise)	
2.6.1	Colour	Black.
2.6.2	Specific Gravity	1.05
2.6.3	Compressive Strength 1 day cure	N/A (no failure at 50% strain)
2.6.4	Compressive Modulus 1 day cure, 50% strain	36 MPa
2.6.5	Compression recovery 1 day cure, 7 day recovery	100%
2.6.6	Compressive Strength 7 day cure	N/A (no failure at 50% strain)
2.6.7	Compressive Modulus 7 day cure, 50% strain	39 MPa
2.6.8	Compression recovery 7 day cure, 7 day recovery	100%
2.6.9	Tensile Strength	7.6 MPa
2.6.10	Maximum strain at tensile failure	> 200%
2.6.11	Tensile Modulus at 100% strain	3.4 MPa
2.6.12	Shore Hardness	90 (A) 35 (D)
2.6.13	Shore Hardness after 7 days water immersion	89 (A) 35 (D)
2.6.14	Weight increase, 7 days water immersion	0.6%

3.0 USES

3.1 EPAR 121B has excellent compatibility with asphaltic surfaces. It may be used as a coating onto which grit or aggregate is bonded to form a skid resistant wearing course.

EPAR 121B is also recommended for mixing with a silica aggregate to form a trowellable mortar, it is ideal as a levelling material for asphaltic surfaces.

EPAR 121B

TECHNICAL DATA Continued

4.0 APPLICATION INSTRUCTIONS

- 4.1 EPAR 121B may be used as a chemically resistant coating for bitumen and concrete surfaces, against acids, oils, fats etc.
- 4.2 EPAR 121B is more heat resistant than asphalt. It will not melt or run in hot summer conditions.
- 4.3 The combination of flexibility and strength make EPAR 121B suitable as a joint filler where a small amount of movement is expected, e.g., expansion joints in concrete slabs. Rubber crumb can be mixed into EPAR 121B to increase flexibility even more.
- 4.4 EPAR 121B mixed with silica aggregate or rubber crumb is an excellent expansion joint nosing material for bridges.
- 4.5 **SURFACE PREPARATION.** Thoroughly clean the jointing surfaces of all extraneous matter, especially oil and grease. Laitance should be removed from concrete surfaces mechanically or by acid etching. For best results steel surfaces should be prepared by sand blasting or grinding.
- 4.6 **MIXING.** Accurately proportion required volume of resin and hardener ensuring this amount can be used within its pot life. Mix thoroughly, preferably using a paint stirrer fitted to a low speed electric drill. During the mixing process scrape the bottom and sides of the container at least once with a spatula or similar tool to ensure all components are incorporated. Mixing should continue for approximately 5 minutes. Take care to avoid air entrapment.

Mix a quantity that can be used within its pot life. Note that mixing larger amounts in hot weather will drastically reduce pot life.

When EPAR 121B is to be mixed with aggregate, resin and hardener should first be mixed as above. Aggregate to be added to the epoxy must be completely dry. Blend in sufficient aggregate to obtain the desired viscosity and mix until an even texture is obtained.

4.7 APPLICATION.

- 4.7.1 **Non-Skid Surfacing.** Apply EPAR 121B at a spreading rate of 2m² per litre, by brush, roller, broom or spray. If the non-skid aggregate is larger than 5mm a lower spreading rate (higher film build) may be required.

Evenly broadcast the non-slip particles onto the surface and do not expose to traffic until epoxy has cured.
- 4.7.2 When EPAR 121B is mixed with more than 3 parts aggregate to 1 part epoxy, surfaces to which it is to bond should first be primed with unfilled EPAR 121B. For best results, brush apply a thin coating of EPAR 121B working it well into the substrate. Apply aggregate filled EPAR 121B while the prime coat remains tacky.
- 4.7.3 When trowelling filled EPAR 121B a smooth finish may be obtained by keeping the face of the trowel wet with EPAR Epoxy Solvent.



The information contained in this data sheet, is to the best of our knowledge accurate and any recommendations or suggestions which may be made are without liability on our part, since the conditions of use are beyond our control. Users are urged to make their own assessment of our products under their own conditions and for their own requirements. Stratmore Construction Solutions Limited reserves the right to alter formulations without notice. Properties as stated were determined under controlled laboratory conditions. This data sheet may be updated without notice. Please ensure you have the latest copy. If you are a customer, then any contract with you is in accordance with our latest terms and conditions, which are available to download from our website. Where goods are acquired for business purposes, Parts 1 to 4 of the Consumers Guarantee Act 1993 will not apply. To the maximum extent permitted by law, we have no liability (whether statutory, in contract or tort, including negligence) to buyers, users or specifiers of our products for any physical, direct or indirect damage, economic loss or any other loss or costs caused or contributed by us or any of our agents or employees in respect of any goods or services supplied. Also to the maximum extent permitted by law, all conditions and warranties expressed or implied by statute or common law, equity, trade custom or usage or otherwise howsoever are excluded. If, notwithstanding the foregoing, Stratmore Construction Solutions Limited is found to have any liability, then it is agreed that the liability is nevertheless limited to the price of the relevant goods or services purchased from us.

EPAR 121B

TECHNICAL DATA Continued

4.0 APPLICATION INSTRUCTIONS (continued)

- 4.8 **CLEAN-UP.** Tools and equipment may be cleaned before hardening commences by washing with EPAR EPOXY SOLVENT. Clean hands and exposed skin with soap and hot water.
- 4.9 Refer to product label for additional information.

5.0 PRECAUTIONS

- Wear appropriate personal protective equipment when using this product. Avoid skin and eye contact.
- Do not breathe vapours.
- Read product labels before use.
- Read Safety Data Sheet for complete handling and first aid details.
- Mix whole pack (4L or 8L) only if it can be used comfortably within 30 minutes (20 minutes in warm weather).

6.0 PACKAGING

- 4 L pack (2 L resin, 2 L hardener)
8 L pack (4 L resin, 4 L hardener)
40 L pack (20 L resin, 20 L hardener).



The information contained in this data sheet, is to the best of our knowledge accurate and any recommendations or suggestions which may be made are without liability on our part, since the conditions of use are beyond our control. Users are urged to make their own assessment of our products under their own conditions and for their own requirements. Stratmore Construction Solutions Limited reserves the right to alter formulations without notice. Properties as stated were determined under controlled laboratory conditions. This data sheet may be updated without notice. Please ensure you have the latest copy. If you are a customer, then any contract with you is in accordance with our latest terms and conditions, which are available to download from our website. Where goods are acquired for business purposes, Parts 1 to 4 of the Consumers Guarantee Act 1993 will not apply. To the maximum extent permitted by law, we have no liability (whether statutory, in contract or tort, including negligence) to buyers, users or specifiers of our products for any physical, direct or indirect damage, economic loss or any other loss or costs caused or contributed by us or any of our agents or employees in respect of any goods or services supplied. Also to the maximum extent permitted by law, all conditions and warranties expressed or implied by statute or common law, equity, trade custom or usage or otherwise howsoever are excluded. If, notwithstanding the foregoing, Stratmore Construction Solutions Limited is found to have any liability, then it is agreed that the liability is nevertheless limited to the price of the relevant goods or services purchased from us.