BUILDING TRUST

PRODUCT DATA SHEET

Parex E20 Epoxy Grout

High strength and flow epoxy resin based grout

DESCRIPTION

Parex E20 Epoxy Groutis part of the Parex E Epoxy grout range cover a wide range apllications and void thicknesses.
Parex E20 Epoxy Grout is a 3 component, high performance, precision, epoxy grouting system. Suitable for placing at temperatures between +5°C and +45°C.

USES

Parex E20 Epoxy Grout may only be used by experienced professionals.

- Machinery base plates
- Crane rail tracks
- Bridge Bearings
- Compressors and pumps
- Reciprocating machinery
- High impact loads
- Space filling and stress transfer

CHARACTERISTICS / ADVANTAGES

- High early strength and fast curing
- Suitable for application at lower temperatures (in conjunction with Parex E33 winter additive)
- Ready to mix, pre-batched units
- Non-shrink
- Good resistance to most chemicals
- Stable against seawater & petroleum products.
- Resists freeze thaw cycles
- Stress and impact resistant
- Exceptional mechanical properties

PRODUCT INFORMATION

Composition	Epoxy resin	
Packaging	Pre-batched unit	24.57 kg (A + B + C)
Shelf life	24 months	
Storage conditions	Stored properly in original, unopened, sealed and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Protect from direct sunlight.	
Density	~1950 kg/m³	

TECHNICAL INFORMATION

Compressive strength	1 day	63 N/mm²	(EN 12190)
	3 days	81 N/mm²	
	7 days	85 N/mm²	
	Typical grout values @ 20°C		
Modulus of elasticity in compression	~11.9 kN/mm² @ 7 days		
Flexural toughness	~38 N/mm² @ 7 days		
Tensile strength	~21 N/mm² @ 7 days		
Ring test	Result from 50mm concentric ring test = 200mm. Flow result of 50mm represents nil flow.		

APPLICATION INFORMATION

Yield	Each pack will yield approximately 12.5 litres of mixed material.
Layer thickness	Minimum grout depth: 8mm Maximum grout depth: 25mm
Material temperature	+5°C min. / +35°C max.
Ambient air temperature	+5°C min. / +45°C max.
Substrate temperature	+5°C min. / +35°C max.
Pot Life	~ 30 mins after mixing @ 20°C

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

IMPORTANT CONSIDERATIONS

- Minimum substrate temperature +5 °C
- The material must be conditioned by being stored in an area with an ambient temperature between +5 °C and +30 °C for a minimum of 48 hours before using.
- Do not thin with solvents. Solvents will prevent proper curing and change mechanical properties.
- Component C must be kept dry.
- Avoid splitting pre-batched units to mix. Mix complete units only.
- Cold ambient, substrate or material temperatures will influence the curing and flow characteristics of Parex E20 Epoxy Grout.
- Do not subject cured epoxy grout to sudden temperature changes especially during early curing stages.

ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Mortar and concrete must be older than 28 days (dependent on minimum strength requirements).
Verify the substrate strength (concrete, natural stone etc.).
The substrate surface (all types) must be clean, dry and free from contaminants such as dirt, oil, grease, existing surface treatments and coatings etc. Steel substrates must be de-rusted to a standard equivalent to Sa 2.5.
The substrate must be sound and all loose particles must be removed.
Substrate must be dry or mat damp and free from any standing water, ice etc.

SUBSTRATE PREPARATION

Remove laitance and all loose material including dust, oil and grease to achieve a sound substrate. Steel surfaces should be free of mill scale and rust. Surfaces to be grouted should be free of standing water and in a surface dry condition. Formwork must be designed with sufficient hydrostatic head to ensure grout flow into and across the grouting area and should be made grout tight. Apply a silicone based release agent to the formwork surfaces which will effect release after grout has hardened. Alternatively use thick polythene sheet firmly fixed to the formwork.

MIXING

Mixing of Parex E20 Epoxy Grout should be carried out with full packs only. Pour all of the resin and hardener into a clean mixing vessel. Mix with a slow speed drill (200-300rpm) and Mortar Stirrer (MR4) until homogeneous. Slowly add the filler to the mixed resin and hardener. When all the filler has been added, mix for a further two minutes until an even colour is achieved. Try and ensure that air entrainment is kept to a minimum by keeping the mixing head below the surface level of the grout at all times. Larger volumes may be mixed using a forced action mixer such as the Creteangle.

APPLICATION

Allow mixed grout to stand for 5 minutes prior to placing to allow entrained air from mixing to be released. Place grout continuously into the work area from one side only. Where further mixes are required to fill the void, these should be prepared in sequence such that pouring is continuous. Place mixed grout within 30 minutes after start of mixing. Place in nominally parallel gap widths between 8mm and 25mm. Tapered sections may be placed down to a featheredge. For thicker sections use E33, E70 or E140 variants. Do not disturb the grouted section until the grout has hardened.

CURING TREATMENT

No special curing is required. Material should be protected for the initial 24 hours from rain and adverse weather conditions

CLEANING OF EQUIPMENT

Sweep excess grout into appropriate containers for disposal before it has hardened.
Dispose of in accordance with applicable local regulations.
Uncured material can be removed with Sika Thinner C.
Cured material can only be removed mechanically.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

SIKA LIMITED
Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited