

PRODUCT DATA SHEET

Parex E140 Epoxy Grout

High strength epoxy resin based grout

DESCRIPTION

Parex E140 Epoxy Grout is part of the Parex E Epoxy Grout Range covering a wide range applications and void thicknesses.

Parex E140 Epoxy Grout is a 4 component, high performance, precision, epoxy grouting system. Suitable for placing at temperatures between 5°C and 35°C.

USES

Parex E140 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.

CHARACTERISTICS / ADVANTAGES

- High early strength and fast curing.
- Also applicable at low temperatures (in conjunction with Parex E33 winter additive).
- Ready-to-mix, pre-batched units.
- Non-shrink.
- Corrosion and chemically resistant.
- Stress and impact resistant.
- High compressive strength.
- Good creep resistance.

PRODUCT INFORMATION

Composition	Epoxy resin and specially selected aggregates	
Packaging	Pre-batched unit	38.9 kg (A + B + C + D)
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	~2000kg/m ³	

TECHNICAL INFORMATION

Compressive strength	1 day	~63 N/mm ²	(EN 12190)
	3 days	~73 N/mm ²	
	7 days	~78 N/mm ²	
Modulus of elasticity in compression	~12kN/mm ² @ 7 days		
Tensile strength in flexure	~20N/mm ² @ 7 days		
Tensile strength	~10N/mm ² @ 7 days		

APPLICATION INFORMATION

Consumption	The consumption of Parex E140 Epoxy Grout is ~ 2.0 kg/m ² per mm of thickness.
Yield	Each 38.98kg pack will yield approximately 18.75 litres of mixed material.
Layer thickness	70mm min. / 140mm max.
Flowability	Result from 50mm concentric ring test = 200mm. Flow result of 50mm represents nil flow.
Ambient air temperature	+5 °C min. / +35 °C max.
Substrate temperature	+5 °C min. / +35 °C max.
Pot Life	~30 minutes at 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.
- Components C & D must be kept dry.
- For proper seating, allow the grout to rise above the bottom (3mm) of the base plate.
- 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 E140 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

Substrates must be sound, dry, clean and free from laitance, ice, standing water, grease, oils, old surface treatments or coatings and all loose or friable particles must be removed to achieve a laitance and contaminant free, open textured surface.

Surface and base plate contact area must be clean and sound. For best results, the substrate shall be dry. Remove dust, laitance, oils, grease, curing compounds, impregnations, waxes, foreign particles, coatings, and disintegrated materials by mechanical means (i.e. chipping with a chisel, blast cleaning, etc.).

All anchor pockets or sleeves must be free of water.

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 silic-

one based release agent to the formwork surfaces which will effect release after the grout has hardened. Alternatively, use thick polythene sheet firmly fixed to the formwork.

MIXING

Parex E140 Epoxy Grout is supplied as a 4 component product. **All components must be used to complete the mix.** 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. Add the aggregate and mix for further minute until the aggregate is well dispersed throughout the mix. 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 a Creteangle.

APPLICATION METHOD / TOOLS

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 gap widths between 70mm and 140mm. Do not disturb the grouted section until the grout has hardened.

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.

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