

EPICON GROUTS

Epoxide Grout

Description

Epicon Grouts are based on solvent free epoxides and are available in four grades to cover the majority of grouting and fixing applications encountered within civil engineering and industry in general where the mechanical properties must be of the highest order.

For large volume applications see Epicon Grout R.T.

Grades Available

- Epicon Grout 'L': A pourable grout for free flow gap grouting recommended for gaps over 20mm.
 Epicon Grout 'M': A lightly filled pourable grout for free flow gap grouting recommended for gaps between 5mm and 30mm.
 Epicon Grout 'S': An unfilled grout for gap and crack widths between 0.25 and 6mm, also suitable for injection applications.
 Epicon Grout 'H' A thixotropic grout for horizontal or inverted fixings.

Applications

- Grouting in machinery, turbines, centrifuges etc.
- Fixing/holding down bolts, starter bars, anchors etc.
- Grouting beneath heavy crane and transporter rails.
- Production of high strength bearing plinths.

Advantages

- Solvent free non-shrink system requiring no primer.
- High compressive, tensile and flexural strengths.
- Rapid strength gain resulting in high bond strength.
- Excellent under severe operating conditions.

Technical Information

STRENGTH DEVELOPMENT

Typical results of compressive strength development given in N/mm². Cubes were tested in accordance with BS6319 Part 2.

Typical Results of Epicon Grout 'L', 'M' & 'H'

Temp	4	6	18	24	48	3	7	28
	hr	hr	hr	hr	hr	day	day	day
20°C	8	22	63	69	79	83	90	95
5°C	--	--	26	39	65	73	84	90

Tensile Strength (BS6319:Pt 7):	19 N/mm ²
Flexural Strength (BS6319:Pt 3):	35 N/mm ²
Secant Modules of Elasticity in Flexure:	10.1 GN/m ²

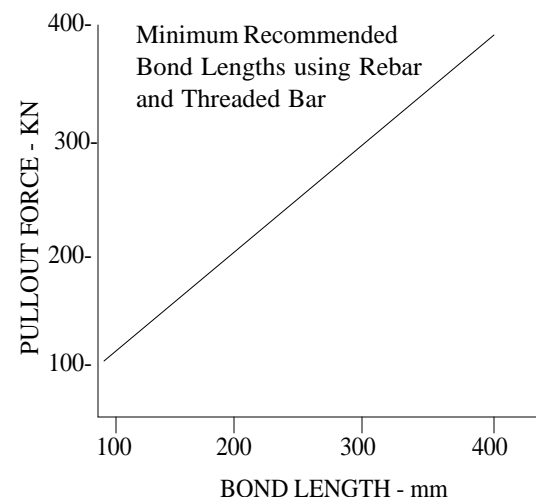
Yields And Pot Life Of Epicon Grouts

Grout Type	Yield cc/kg	Pot Life - Mins		
		20°C	10°C	5°C
L	505	54	112	170
M	513	47	94	140
S	910	30	55	60
H	547	50	93	135

BOND STRENGTH DEVELOPMENT

The bond strength of Epicon Grout fixings is dependent on several factors, the main ones being:

- strength of base material
- method of drilling hole
- type of fixing
- resin bond length



Surface Preparation

All surfaces should be free from oil, grease, chemical contamination and all loose material. Oil and grease can be removed using Desolve. Concrete should be scarified or etched using Chemclean Acidic Cleaner to remove any laitance. Steel surfaces should be grit blasted to remove all rust and scale. All surfaces should be free from standing water.

Holes should be drilled to the required depth and diameter using a rotary percussive drill and all dust and debris removed using either compressed air or a bottle brush. For grouting under machinery etc., it will be necessary to use shuttering and construct a simple hopper system to give the grout a "head" of material enabling it to flow under the machinery.

Mixing - Epicon Grout 'L','M' & 'H'

The entire contents of the Epicon Grout Hardener should be thoroughly mixed with the entire contents of the Epicon Grout Base. This can be carried out in the plastic bucket supplied or in the Base Resin tin for the large packs. The aggregate is then added to the mixed resin and thoroughly mixed until an even consistency is obtained.

It is recommended that a forced action mechanical mixer such as a Creteangle or Daines be used.

Alternatively a slow speed drill (R.P.M. approx. 500) fitted with a suitable paddle may be utilised taking care not to entrain air in the mix.

Mixing - Epicon Grout 'S'

The entire contents of the Epicon Grout Hardener should be added to the Epicon Grout Base and slowly stirred using a pallet knife until the materials are thoroughly mixed.

Application Instructions - Pourable Grouts

When grouting under machinery etc., the grout should be passed from one side only via the feed hopper. It is important that this is a continuous feed so if more than one mix is required this must be carefully planned to regularise the feeding of the hopper.

Where grout is being poured into fixing holes the grout should be poured slowly and carefully to prevent air locking. The fixing should then be inserted slowly down into the resin and checked for full bonding. The fixing should be left undisturbed until the grout has cured.

All equipment should be cleaned immediately after use with Nuwash.

Application Instructions - Epicon Grout 'H'

Epicon Grout 'H' should be applied using a cartridge gun with an extension tube if necessary and introduced to the full depth of the hole. Slowly place the grout in the hole whilst withdrawing the extension tube. Push the fixing slowly into the grout and check for bonding then leave undisturbed until the grout has cured. All equipment should be cleaned immediately after use with Nuwash.

Packaging

Epicon Grout 'L': 4.5 kg and 20 kg units

Epicon Grout 'M': 4.5 kg and 20 kg units

Epicon Grout 'S': 0.5 kg and 1 kg units

Epicon Grout 'H': 4.5 kg units

Storage

Epicon Grouts should be stored at room temperature. If stored in cold conditions the components should be warmed prior to use as this will greatly aid mixing and pouring. Epicon Grout should be stored away from foodstuffs and out of the reach of children.

Health & Safety

Epicon Grout, like similar products, is capable of irritating unprotected sensitive skin. We therefore recommend the use of a suitable barrier cream and the wearing of goggles and gloves.

Limitations

If grouting below 5°C contact the manufacturer's technical department.

Technical Support

Through our technical department and laboratories we can offer a comprehensive service to specifiers and contractors.

Technical representatives are available throughout the UK to provide further information and arrange demonstrations.



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