

TECHNICAL DATA FOR BS EPOXY 710G

High strength, flowable cum trowelable epoxy resin grout system.

Description for BS Epoxy 710G

BS Epoxy 710G is a solvent-free low exothermic, filler based grouting system, designed on modified epoxy resin for use as a high precision, heavy duty flowable cum trowelable grout for civil engineering applications.

It is supplied as a three component system consisting of epoxy resin, combined with inert fillers and the hardener, to produce a high viscosity flowable liquid grout suitable for voids of 50-150mm

Recommended Uses of BS Epoxy 710G

1. Machinery foundations with dynamic loads and vibration, where repetitive compression / tension makes cementitious grouts ineffective
2. Backing Filler of steel liners of ore crushing machinery in mines and quarries.
3. In corrosive environments where chemicals, oils and solvents render cementitious grouts unsuitable.
4. Machinery base plates, crane rails, anchor bolts, hold down bolts and heavy equipment where tensile strength greater than cementitious systems are required.

Advantages of BS Epoxy 710G

1. Reduced Downtime – Low exothermic property allows thick single pours especially for a reduced downtime
2. Excellent chemical resistance – Protection against attack from mineral acids, oils, fats, fuels, and strong alkali, salt solutions, lubricating and hydraulic oils.
3. High bond strength – Excellent adhesion to prepared surfaces. Compatible with other epoxy primers like BS Epoxy 611 or similar.
4. Supplied in pre-measured smart kits – Eliminates the need for complicated on-site measuring and ensured product performance
 - **1kg + 500gm + 8.5Kg (Kit Size)**

Application Notes

1. No curing required.
2. Cure time varies depending on quantity mixed, placed and ambient temperature.

3. Initial set at 24°C will be in 4-6 hours. BS Epoxy 710G will be fully cured with maximum physical strength and chemical resistance at 7 days at 24°C.
4. Do not install equipment before full cure has been attained or creep may occur.
5. Note: Curing rates and strength gain are retarded at lower temperatures - curing will not occur below 5°C

Cured Properties of BS Epoxy 710G				
Property	Test Method	Unit	Flowable Mix	Mortar Mix
Compressive strength	ISO 604	MPa	80 – 90	90 - 100
Flexural strength	ISO 178	MPa	35 - 45	30 - 35
Tensile strength	ISO 527	MPa	15-25	10 - 20
Impact Resistance	ASTM D-2794	Joules	8-10	8 - 10
Bond strength	ASTM D-4541	Kg/cm ²	35 till (Concrete failure)	35 till (Concrete failure)

Physical Properties of BS Epoxy 710G		
Feature	BS Epoxy Resin 710G	BS Epoxy Hardener 710G
Type of Material	Solvent less epoxy	Polyamide
Appearance	Colorless to pale yellow, clear liquid	Brown , clear liquid
Density at 25 C (g/ml)	1.1 (typical)	1.0 (typical)
Viscosity at 25 C (mPa.s)	10000 - 14000	500 - 1500

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Mixed Proportion and Pot Life		
Property	Mixed Part by weight	Pot Life
Primer system: BS Epoxy 611, Resin & Hardener	100 : 50	Mix @30°C : Approx.45 - 60 min.
Flowable Mortar system BS Epoxy 710G Resin + Hardener + Filler	100 : 50 : 400	Mix @30°C : Approx.40 - 60 min.
Trowelable Mortar system BS Epoxy 710G Resin + Hardener + Filler	100 : 50 : 850	Mix @30°C : Approx.40 - 60 min.

LEGAL DISCLAIMER & CARE

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- MSDS CAN BE PROVIDED ON REQUEST

The performance data is typical and based upon controlled laboratory conditions. Actual performance on the job site may vary from these values based on actual site conditions.

Other Information	
Property	Requirement
Best Before Use. 9 Can be revalidated if needed	12 Months in a sealed unopened container, stored as per requirement
Storage	Should be stored in a well ventilated place. The area of storage shall be covered protecting the material from direct sunlight.
Safety & Handling	Use gloves, goggles and barrier cream. Avoid contact with skin. Ensure adequate ventilation during application.
Disposal of empty container	Follow local guidelines. Not to be thrown near a source of water. uncured material is harmful to aquatic life.
Cleaning	Tools & Containers can be cleaned with suitable solvent . Cleaning to be done before mixed material starts to harden.