

TECHNICAL DATA FOR BS EPOXY 611

Solvent Free Epoxy System for Repairs, Grouting & Protection

Description of BS Epoxy 611

Epoxy 611 R is a modified solvent free epoxy resin which in combination with Epoxy 611 H cures into hard mass. The product is suitable for primer application as well as final coating on various substrates. Its USP is its moisture insensitivity and large range of compatibility in various applications in the construction industry.

Advantages of BS Epoxy 611

BS Epoxy 611 system is characterized by-

- 1) Good mechanical properties
- 2) Low exotherm & long pot life
- 3) Excellent adhesion under wet & dry condition
- 4) Ability to cure in moist condition
- 5) Does not affect potability of water after curing.
- 6) Excellent Grouting performance in concrete structures
- 7) Cured mass is stable under high ambient temperature conditions upto 65 to 70 C

Areas of Application BS Epoxy 611

BS Epoxy 611 combination is suggested for,

- 1) Bonding of old to new concrete.
- 2) Primer for Epoxy and Polyurethane resin systems.
- 3) Grouting in concrete masses even with sight moisture, but not flowing water.
- 4) Coating of water tanks, pipes and other metal or Concrete surfaces
- 5) Filling of horizontal and vertical joints in concrete.
- 6) Epoxy mortar binder.

Application Methods BS Epoxy 611

Surface Preparation-All surfaces must be sound, clean, dry, and free from oil, grease, cement laitance and all loosely adhering particles.

Product application-Use the product as per the requirement for primer/ bond coat as recommended for specific use. Mix components of primer in proportion as recommended. Once mixed, primer should be immediately applied in a thin, continuous film using a stiff

brush/ roller or trowel. Porous floors may require two coats of primer. Primer should be allowed to cure sufficiently, normally 6 - 18 hrs, prior to application of subsequent topping.

For Grouting

Use an electrically operated chemical grouting pump. Mix the parts first in a container and then pour the mixed material in the epoxy / chemical pump to start pressure grouting. Follow the grouting till concrete is saturated and residual material comes out from the cracks.

Clean the pump immediately with a solvent thinner system after the job is complete.

Cleaning of Tools:

Tools and equipment contaminated with epoxy can be cleaned with suitable solvent. Cleaning should be done before it starts to gel or harden.

Properties of Material Supplied:

	Unit	Epoxy 611 R	Epoxy 611 H
Type of Compound	-	Modified epoxy	Polyamide
Color & Appearance	-	Yellow to pale brown, clear liquid	Yellow, clear to slightly hazy liquid
Solids at 120°C	%	65 ± 3	84±2
Viscosity at 25°C	mPa.s	250 - 450	2500 - 5500

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Mixing Proportions & Pot Life:

Product	(Parts by weight)	Pot life
Epoxy 611 R : 611 H	100 : 50	Mixture@30°C : Approx.60 min.

Curing Schedule:

Touch Dry: 6 - 8 hrs Recoating Time: 12 -16 hrs

Cured material Properties:

Curing schedule for specimens: 15 days at room temperature (25°C – 40°C)

Property	Test Method	Unit	Typical values
Hardness	ISO 868	Shore D	75
Compressive strength	ISO 604	Mpa	35
Flexural strength	ISO 178	Mpa	45
Tensile strength	ISO 527	Mpa	25
Impact resistance	ASTM D-2794	KJ / m ²	8.5
Bond strength	ASTM D-4541	Kg/cm ²	35 (Concrete failure)
Density at 25°C	IEC 455	g/cc	1.11

Safety and Handling:

Use gloves, goggles and barrier cream. Avoid contact with skin. Ensure adequate ventilation during application. For further details, refer to the Material Safety Data Sheet.

Storage and Shelf Life:

Buildsmart products should be stored in a well ventilated place. The area of storage shall be covered protecting the material from direct sunlight. The shelf life of these products shall be one year from the date of manufacture in a sealed unopened container.

Disclaimer:

This information is intended only for general guidance in the application of our product. It has been obtained by careful investigation and represents the present state of our knowledge and experience. Because of the large number of possible methods of application and processing we are not able to assume responsibility in any one particular case for either the technical results or the patent rights situation applicable to the country under consideration.