TECHNICAL DATA SHEET

EPONITE EP RANGE



Thixotropic Epoxy Adhesive

PREMCRETE

EPONITE EP/T/FC/VFC





UK CONFORMITY

CE CONFORMITY

DESCRIPTION

EPONITE EP is a thixotropic, solvent free structural epoxy adhesive ideal for bonding a wide range of applications from Segmental Bridge Adhesion to the bonding of general building materials to one another including concrete, brick, metal, stone, and wood. EPONITE EP has a high level of mechanical integrity and exhibits excellent bonding characteristics even under damp (but not wet) conditions. Eponite EP-T is a specially thickened version for use where reduced slump and higher build are required or in warmer weather conditions to retain build in vertical applications. FC (Fast Cure) and VFC (Very Fast Cure) are available on request for faster setting times. Eponite EP is compliant with EN1504- 4:2004 Method 4.4 Bonded Mortar or Concrete.

USES

EPONITE EP is a versatile, epoxy paste adhesive, particularly suitable for all general-purpose bonding operations and thin section concrete repairs. It is also used in conjunction with Hydroband HP1 and HP2 to form a watertight but flexible joint.

ADVANTAGES

- Colour coded components to ensure correct mixing.
- Excellent adhesion to most building materials.
- Bonds to damp substrates
- Low odour
- Thixotropic nature facilitates application in both vertical and overhead locations.
- Very good chemical properties and cohesive strength

EPONITE EP/T/FC/VFC

TECHNICAL & PERFORMANCE PROPERTIES

Property	Test Method	Value
Colour	N/A	Light Grey
Specific Gravity	N/A	1.5g @ 20°C
Pot Life	N/A	50 minutes @ 20°C
Compressive Strength @20°C	N/A	40 MPa – 1 Days
	N/A	75 MPa – 7 Days
Tensile Strength	N/A	18 MPa
Moisture Resistance	N/A	<0.4% increase at 28 days (BS6319:Part 8)
Lap Shear Strength to grit Blasted steel	N/A	14 MPa
Shrinkage on Curing Negligible Hold Up	N/A	>15mm when using the EP-T version
Application Temperature Range	N/A	-3°C to 30°C*
Touch Dry @ 20°C	N/A	EP: 4-6 hours
	N/A	EP-T FC: 3-4 hours
Hard Dry @ 20°C	N/A	EP: 0-12 hours
	N/A	EP-T FC: 5-7 hours
Elastic Modulus Comp	N/A	6,300N/mm²
Slant Shear Strength to Concrete at 24 Hours	N/A	45° Smooth Plane – 20MPa (Concrete Failure)
	N/A	30° Smooth Plane – 13.7MPa (Concrete Failure)

INSTALLATION PROCEDURE

Surface Preparation

Concrete substrates should be sound, clean, and free from dust, dirt, grease, oils, laitance, frost and ice and other contaminants. A roughened or profiled surface will ensure optimum adhesion. Mild steel and other metallic substrates shall be degreased, power wire brushed, or grit blasted and vacuumed free from dust.

Mixing

The base and curing agent components should be thoroughly mixed together using a slow speed drill with paddle attachment, until a uniform grey mixture has been produced, for a minimum of 3 minutes.

Application

The application of EPONITE EP is best achieved using spatula, trowel, serrated trowel, or stiff- bristled brush depending on the area to be treated.
EPONITE EP should be applied to each of the two substrates to be bonded. The two substrates are then pushed together to achieve the required bond. This application does not apply when using it with HYDROBAND HP. When using it as an adhesive for HYDROBAND HP, refer to the HYDROBAND HP technical data sheet application section.
Equipment Cleaning: Clean all equipment immediately after use, with PREMCRETE CLEANING SOLVENT.

Curing

EPONITE EP will be hard dry following 10-12 hours of curing at 20°C. At higher temperatures, this period will be reduced and at lower temperatures this period will be increased. Allow 7 days for optimum mechanical properties and full chemical resistance.

Limitations

At temperatures below 10°C there will be an increased setting time. For lower working temperature, Eponite EP-T VFC can be used down to -3°C. Do not apply to uncured concrete substrates. Eponite EP-T can be used above 30°C but note there will be reduced viscosity and short pot life. Site trials must be undertaken to ensure safe application is possible in extreme conditions.

EPONITE EP/T/FC/VFC



PACKAGING & COVERAGE

Pack Size

5kg, 10kg, 20kg

Yield

3 litres per 5kg pack, 6 litres per 10kg pack, 12 litres per 20kg pack.

Coverage

A 5kg pack will cover 1.5m^2 at 2mm thickness

A 20kg pack will cover 6m^2 at 2mm thickness

STORAGE & SHELF LIFE

Store in dry, frost-free conditions, out of direct sunlight. Protect from frost. In low temperatures, Eponite EP should be stored in controlled temperatures >10°C. EPONITE EP has a minimum shelf life of 12 months when stored in original, unopened containers, in accordance with the manufacturer's recommendations.

HEALTH & SAFETY

Avoid contact of material with skin and eyes. Wear appropriate gloves, overalls, and eye protection during use. Wash off skin with soap and water. Any eye contamination must be rapidly irrigated with copious amounts of clean water and immediate medical attention sought. See separate Material Safety Data Sheet.

44 Macadam Way | West Portway | Andover | Hampshire | SP10 3XW
www.premcrete.com | 02380 276166 | sales@premcrete.com

PREMCRETE