



KEM GELL EP

Multi purpose epoxy adhesive

Ref. CR/BA-V1-0112

Description

KEM Gell EP is a thixotropic two component epoxy resin based compound with exceptional adhesive and sealing properties. The gel like consistency makes it easy to apply and finish. The colours of base and hardener component are different, to facilitate ease of mixing.

Uses

- As a bonding agent for most construction materials including such as glass, timber, concrete, some plastics, rubbers and cement boards.
- For repairing minor surface imperfections in concrete prior to epoxy coating.
- As surface sealant for crack injection systems.

Advantages

- Gel like consistency allows application to vertical surfaces and filling into blowholes and minor cracks.
- Easy to mix and apply
- Good resistance to water and chemicals.
- Bond to concrete is better than the tensile strength of concrete.
- Can be used to bond various surfaces.

Typical Properties

Volume solids: 100% - Solvent Free.

Pot life: 15 minutes at 25°C and 5-10 minutes at 35°C

Cure time: 6-8 hours at 25°C and 3 hours at 35°C.

Minimum Cure Temperature: 5°C

Maximum Cure Temperature: 80 °C

Over coating window: 25° C - 8-24 Hours and 35°C - 6-18 Hours.

Chemical Resistance: Resistant to oils, fats, petrol, common salt and sugar solutions, bleach, dilute acids, alkalis and various solvents. Please contact Chembond Chemicals Technical Department for specific advice on chemical resistance.

Direction for use

Surface to be bonded should be dry, sound and thoroughly clean. Smooth surfaces should be abraded

Concrete, cement plaster, cement board shall be dry free of laitance, dirt and loose particles with sufficient roughness to provide key.

Steel surfaces shall be clean, dry and sand blasted to SA 2 ½.

Other surfaces shall be clean and dry. Abrade to provide key.

PVC surfaces shall be cleaned using trichloroethylene or similar solvent and abraded.

MIXING:

Normally, the entire contents of the "Hardener" "Base" components are mixed to obtain a uniform colour and consistency. After mixing, material can be taken directly from can or subdivided into several small portions on a flat board for individual applicators. For small applications a proportion of three (3) volumes of base and one (1) volume of Hardener can be used. This should be done as accurately as is practically possible. Mixing can be done using a spatula or pallet knife.

Application

As an adhesive and bonding agent:

KEM Gell EP shall preferably apply to both surfaces in a thin continuous film and then both surfaces shall be pressed together. Generally, for normal bonding, an adhesive layer between 100 and 200 microns should be sufficient. Care must be taken to obtain the correct positioning for the parts to be bonded. Once set the bond will be difficult to break and reposition. Extrusion of the adhesive should be prevented. Clamping or suitable support is necessary. Excess material shall be removed from the joints with a sharp knife, or a damp cloth before it sets.

For surface sealing before crack injection:



Apply the mixed product using a trowel, scraper or pallet knife as is appropriate and allow to cure for at least 8 hours.

For repairing minor surface irregularities in concrete:

Usually using a trowel, application thickness will depend on substrate profile, however it will range from feather edge to a maximum of 2mm. For depths higher than 5mm use KEM Mortar EP 1 or KEM Mortar 2 for horizontal applications and KEM Mortar EP 1 or Kem Mortar EP3 for vertical and overhead situations.

Limitations

KEM Gell EP should not be exposed to moving water, rain or frost before it sets. Application below 5°C is not advisable.

Cleaning:

Tools and equipment must be cleaned with suitable solvent immediately after use. Hardened KEM Gell EP is difficult to remove and may require mechanical tools.

Packaging

It is available in 0.750 kg. Pack.

Storage and Shelf life

Store in dry conditions up to 30° C.

12 months in original unopened packs. If stored at higher temperature the shelf life may be reduced to 6 to 9 months.

Technical Service

Chembond has established itself in various fields on the basis of its dependable technical service. For this purpose, we maintain a well equipped laboratory for research & quality assurance of all products. Our experienced personnel are always on call and would always be available for product demonstrations and product performance monitoring.

Safety precautions

Use of gloves is recommended. Use face mask if working in enclosed areas.

FIRE: It is non flammable but will burn in a fire.

KEM Gell EP should not come in contact with skin and eyes or be swallowed. Avoid prolonged inhalations of the vapors. Some people are sensitive to hardner component therefore; protective gloves, goggles and barrier cream should be used. Ensure adequate ventilation and if working in enclosed areas, suitable breathing apparatus must be used. If this product comes in contact with skin, it must be removed before it gets dry by washing with soap and plenty of clear water and seek medical advice. If swallowed, seek medical attention immediately. Do not induce vomiting.

Note

All Chembond Technical Data Sheets are updated on regular basis; it is the user's responsibility, to obtain the most recent issue.

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