

## CHEMRITE GROUTS – CR-FC

### Fast cure concrete repair compound

#### Product Description

CHEMRITE® CR-FC epoxy is a 100% solids epoxy compound used in industrial applications to repair damaged or spalled concrete **fast**. When thickened to the paste state, CHEMRITE® CR-FC is an excellent product to repair corners or edges of concrete.

CHEMRITE® CR-FC is manufactured as a three part mix, giving the users the advantage of changing the consistency from a flowable compound to a non-sag paste. CHEMRITE® CR-FC has excellent adhesion qualities and excellent chemical resistance.

#### Features

CHEMRITE® CR-FC is a versatile, multi-use high strength and low temperature cure epoxy compound. The flowable compound is excellent for reforming concrete using formwork. The self-levelling properties make it easy to fill tight corners or attain the shape you want.

When thickened with CHEMRITE® graded aggregate, the compound will become a paste. The paste mix is putty-like and is easy to apply and mould. It is fast curing in order to limit down times. Its non-sag paste-like consistency before hardening is suitable for knifing or trowelling onto vertical and overhead surfaces. It can also be coloured to suit neighbouring concrete or painted if required.

Some other features:

- Multi-purpose use
- Excellent adhesion
- Good chemical resistance
- Fast curing
- Non-shrink
- Low temperature cure



#### Typical applications

- Repairing damaged and honeycombed concrete fast
- Covings
- Joining or repairing concrete pipes
- Bonding masonry, steel, stone and wood to concrete
- Repairs to damaged floors
- Bonding tiles to metal or concrete surfaces
- General concrete repairs

**Technical**

	<b>CR-FC (Paste)</b>
<b>Binder : Aggregate Ratio (weight)</b>	1:5
<b>Work time (@25°C , 55% RH )</b>	15 Minutes
<b>Cure Time (@25°C , 55% RH )</b>	24 hours
<b>Bond to concrete</b>	Concrete failure
<b>Compressive Strength (ultimate)</b>	82 MPa
<b>Compressive Strength (3 hours)</b>	78MPa
<b>Flexural Strength (3 hours)</b>	29 MPa
<b>Specific Gravity</b>	1.8
<b>Shelf life</b>	2 years
<b>Chemical Resistance (Oils, Solvents)</b>	Excellent
<b>Colours</b>	Grey
<b>Solids Content</b>	100%

**Resistance to chemical spillage**

- Ammonia solution (20%)
- Sulphuric Acid (60%)
- Food emulsion
- Hydrochloric Acid (33%)
- Sodium Chloride
- Fuel
- Oils

**Preparation and application****Concrete Preparation**

Remove all loose material by high pressure water blasting, shot/sand blasting or using a small concrete breaker. Clean concrete until all the fixed aggregate is exposed. Damaged or corroded reinforcing may need to be replaced according to engineer's recommendations.

The area should then be primed using CHEMRITE® CR Primer. The area should be primed so that all exposed surfaces are covered. If the first primer coat is quickly absorbed by the bare concrete, a second coat of primer can be applied immediately.

**Mix Preparation**

Add all of Part B to the Part A container. Ensure that the Part B container is emptied by using a trowel to scrape all material from the container corners. Mix the compound at a very slow speed of about 350 rpm, or by hand. (Hand mixing will take longer and must be thoroughly done).

Add the amount of CHEMRITE® epoxy aggregate required and continue mixing. Mixing should continue until it is clear that the product has a constant consistency and the aggregate is evenly distributed.

**Application**

Any formwork should be coated with a release agent before use. Once the formwork is fixed in place, any gaps should be filled with a dry epoxy mix or suitable foam. The flowable epoxy compound can now be prepared and poured into the frame created by the formwork.

The form work can be stripped 1 hr after pouring (25° C, 55% RH). Note that liquid pours over 2 litres must be carefully managed as CHEMRITE™ CR-FC gives off heat when curing. For large pours, use CHEMRITE® CR-GP, which is slower curing.

Paste mix – The concrete area MUST be primed using CHEMRITE® CR Primer. This will ensure good adhesion to the substrate. The paste should be applied to the primed surface while the primer is still tacky. The paste can be moulded into shape by hand or using a steel trowel.

**Cleaning**

All tools and spillages can be cleaned before the curing process has started using the CHEMRITE Technologies Epoxy cleaner (A011).

**Packaging**

CHEMRITE® CR-FC is sold in 11 litre kits and consists of 2.75 litres CHEMRITE® CR-FC epoxy and 20 kg CHEMRITE® epoxy aggregate.

**Safety Precautions**

Whenever applying an epoxy resin, protective clothing must be worn. At a minimum, suitable rubber gloves and protective eyewear must be worn.

This epoxy is classified as hazardous and it is recommended that you refer to the Material Safety Data Sheet (MSDS).

**Product Disclaimer**

This Technical Data Sheet (TDS) summarises to the best of our knowledge the product and how to use and apply the product based on the information available to us at the time. It is recommended that you read this TDS and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. If you are uncertain about any content herein, it is strongly recommended that you contact one of our technical experts for advice. Our responsibility for products sold is subject to the CHEMRITE Technologies standard terms and conditions of sale. We do not accept any liability for any losses suffered for damages of any nature whatsoever resulting from the use of or reliance upon information or the product to which information refers.

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