



# R-Epoxy repair mortar binder

R-Epoxy repair mortar is a pre-weighed, two-part solvent free epoxy resin system. Supplied as two components of base and resin hardener, R-Epoxy binder can easily be made into a high strength repair and jointing mortar with the addition of specially graded silica and quartz fillers. The mixed materials produce a rapid hardening adhesive and repair compound for precast and insitu concretes.

## Uses

- Repair of insitu and pre-cast concrete.
- Rapid repair and jointing of concrete slabs, pipe sections and masonry.
- Filling of holes and pockets in precast panels.
- Protection of steel reinforcement.
- Fixing of kerbs, tiles, manhole sets.

## Properties

Minimum Application  
Temperature 5°C

Resin Appearance when  
mixed: clear, light yellow  
Density: approx 1.08  
Flash Point: >130°C

## Typical Compressive Strengths:

1 day: 50 N/mm<sup>2</sup>  
3 days: 60 N/mm<sup>2</sup>  
7 days: 70 N/mm<sup>2</sup>

## Typical Tensile strength:

7 days: 14N/mm<sup>2</sup>

The type and quantity of filler/aggregate used will affect values achieved.

Chemical resistance: The cured resin is resistant to fresh water and seawater, petrol, oil, grease and most acids, alkalis and solvents.

## Instructions for use

### Preparation

All contact surfaces must be free from oil, grease, water as well as any other contaminants and loose materials. Concrete should be clean, dry and sound and cracks, bolt holes or fixing pockets should be cleaned of dirt, dust and other loose materials.

Repair of precast and insitu concrete units: All loose and flaky cementitious residues as well as all contamination such as mould oils and grease should be removed before the application of the repair mortar. Use of wire brushing or light grit blasting to ensure full cleansing of the repair area is recommended. Where ever possible delineate the



perimeter of the area to be repaired with a chase to provide a straight edge for the mortar to be placed against and to avoid feather edging.

### **Mixing:**

Complete packs of resin should be used unless dispensing and mixing is to be done by a machine designed for the accurate and safe mixing of the **R-Epoxy** resin compounds.

### **Resin Setting times**

Air and surface temperatures as well as volume of resin in the container affect the time for which the material will remain workable:

Typical values in minutes are:

**10°C 50 minutes**

**20°C 35 minutes**

**30°C 10 minutes**

When completely cured, the mortar and repair compound is resistant to sub-zero temperatures and is suitable for use up to 45°C.

### **Precautions:**

Exotherm: Mixed epoxy resins will develop temperature during their curing period. This could result in heat generation and possible smoking if the material is unused and kept in bulk.

Care should be taken to use all mixed materials within the stated potlife or provide a well ventilated place away from other materials until any exothermic reaction has taken place and the product can be disposed of properly.

For details on the Health and Safety aspects relating to this product please refer to the Material Safety Data Sheet.

### **Cleaning**

All tools and equipment should be cleaned immediately after use with REDROCK Epoxy Cleaner.

### **Labour and environmental protection**

The resin and hardener components in **R-Epoxy** mortar are classified as hazardous. Please refer to the Material Safety Data Sheet for advice on environmental issues, disposal and relevant PPE for the user.

### **Storage**

Store away from heat and frost and out of direct sunlight. R-Epoxy mortar has a shelf life of 12 months if kept in dry conditions at 20°C.

### **Packaging**

**R-Epoxy** mortar binder is supplied in standard 2.5 kg units comprising separate base and hardener resin compounds which when mixed yield 2.3 litres.

For larger applications or if used with calibrated in line mixing equipment, bulk supply of the base and hardener is available in 25 litre UN containers



(or larger upon discussion with Redrock Ltd.).  
Specially graded filler material is available to make an R-Epoxy mortar, please contact Redrock for details.

*The above details have been compiled to the best of our knowledge on the basis of thorough tests and our practical experience of the product performance. However, due to the fact that Redrock has no direct control over where or how its products are used, Redrock offers no guarantees nor accepts any liabilities deriving from or in connection with its products nor with information given in this leaflet. Redrock products are sold subject to its standard terms and conditions, copies of which may be obtained on request or viewed on the website.*

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