# Product Data Sheet

REDEFINING CORROSION CONTROL

# COROGROUT EN
## Epoxy Novolac Equipment Grout

## PRODUCT DESCRIPTION
**COROGROUT EN** is a 100% solids, three-component, high performance epoxy novolac grouting material consisting of resin, hardener and aggregate. **COROGROUT EN** resists alkalis, oils and lubricants, many types of acids. It exhibits excellent resistance to 98% sulfuric acid and all concentrations of sodium hydroxide.

## GROUTING COMPOSITION
The grouting system consists of a resin, hardener and aggregate. The 171 lb. (78 kg) unit provides 1.35 $ft^3$ (38 l) of coverage with a maximum pour of 3" (75 mm). Aggregate loading can be adjusted slightly to produce appropriate flow depending on temperature and depth of pour.

For some applications there may be a requirement for further extension of the grout using pea gravel. Consult RCC Corrosion Control for recommendations.

## FIELDS OF APPLICATION
**COROGROUT EN is** designed to provide support for equipment requiring precision alignment in corrosive environments. It is designed to provide high strength, excellent chemical resistance and good adhesion to concrete and steel.

## FEATURES
- High strength
- Very good broad based chemical resistance
- Excellent adhesion
- Low exotherm
- Rapid return to service

## CHEMICAL RESISTANCE
Information on the chemical resistance properties is available upon request.

## SURFACE PRE-TREATMENT
**Carbon steel**

Oil must be removed from the steel using a suitable degreaser. Where bonding of the grout is desired steel surfaces should be abrasive blasted and cleaned.

**Concrete**

The concrete must be thoroughly cured and dry at the time of application. For optimum performance the recommended compressive strength is 3500 psi (25 $N/mm^2$) or higher.

The concrete must be mechanically roughened by chipping to remove laitance and weak, unsound concrete. For best results a minimum 1/8" (3 mm) surface profile should be achieved, exposing 1/2" (13 mm) coarse aggregate. The surface must be clean prior to grout placement.

**Forms**

Build forms at least one inch above the bottom of equipment frame and no greater than 6" (150 mm) away from the edge of the baseplate, rail or soleplate. 2 – 6" (50 – 150 mm) is typical. Apply two heavy coats of paste wax to forms before they are erected. Seal the forms after erection to ensure they are liquid tight.

## APPLICATION
- Pour **Hardener No. 10** (.88 gallon) into the pail of **COROGROUT EN Resin** (1.4 gallon) and stir well using a slow speed drill motor and paddle mixer. Scrape the sides of container during mixing to ensure hardener is fully mixed with the resin.
- Pour resin/hardener mixture into a mortar mixer. Add aggregate (3-50 lb bags) gradually. Mix only until aggregate is fully wetted. Mix at low speed, maximum 20 rpm.
- The amount of aggregate can be adjusted depending on the type of pour, grout thickness, access, flow distance and temperature.
- Pour the grout from one side of the form through to the other. The grout will flow, but when necessary it can be aided by pushing with banding straps or plywood strips in the direction of the grout flow with long, slow strokes. Do not vibrate.
- The exposed grout surface can be smoothed by light troweling and brushing with mineral spirits
- Shade the area from direct and indirect sunlight at least 24 hours before and 48 hours after grouting.

## MIX RATIO

The mixing ratio of **COROGROUT EN Resin** to **Hardener No. 10** is 1.6:1 by volume.

## CONSUMPTION

| Grout Description | Weight lb (kg) | Thickness inch (mm) | Yield $ft^3$ (l) |
|---|---|---|---|
| **COROGROUT EN** | | | |
| 171 lb (78 kg) Kit | | | |
| COROGROUT EN Resin | 14.0 (6.4) | 1-3 | 1.35 |
| Hardener No. 10 | 7.3 (3.3) | (25-75) | (38) |
| COROGROUT Aggregate | | | |
| [50 lb (22.7 kg) bag] | 150 (68.1) | | |

The grout material is supplied in premeasured units including resin, hardener and aggregate so that weighing or measuring of the components is kept to a minimum.

## WORKING TIME

| Temperature | COROGROUT EP |
|---|---|
| 50°F (10°C) | 90 min |
| 70°F (21°C) | 45 min |
| 90°F (32°C) | 25 min |

## CURE TIME (to place in service)

| Temperature | Cure Time |
|---|---|
| 70°F (21°C) | 5 days |
| 90°F (32°C) | 3 days |

## CLEANING: Cleaning Agent T-100

## SAFETY MEASURES

The material safety data sheets of the individual components as well as the legal requirements for handling hazardous materials must be observed.

## PACKING UNITS

The products are supplied in the following standard package sizes:

| Description | Package Size |
|---|---|
| **COROGROUT EN** | 2.2 gal kit |
| **COROGROUT Aggregate** | 50 lb bag |

### Storage

The materials must be stored in a cool and dry place. At storage temperature of 70°F (21°C) the shelf life is as follows:

**COROGROUT EN Resin & Hardener No. 10** 24 months
**COROGROUT AGGREGATE** Indefinite, if kept dry

If the storage time is exceeded, the materials must be tested before use. Higher storage and transport temperatures will reduce the shelf life. The containers must be kept tightly closed. Liquid products must be stored frost-proof.

| Technical Data | Testing Standard | Unit | Value |
|---|---|---|---|
| Generic Type | | | Epoxy novolac grout |
| Color | | | Red |
| Compressive Strength | ASTM C 579 Method B | Psi<br>MPa | 8,000<br>55 |
| Density | ASTM C905-96 | lbs/gal<br>kg/l | 9.8<br>1.18 |
| Tensile Strength | ASTM C307 | Psi<br>MPa | 2000-2500<br>14-17 |
| Flexural Strength | ASTM C580 | Psi<br>MPa | 4000<br>28 |
| Bearing Area | ASTM C1339 | % | High |
| Flexural Modulus (tangent) | ASTM C580-02 | Psi<br>Gpa | $1.5 \times 10^6$<br>10.0 |
| Volatile Organic Compounds | EPA Method 24 | g/L<br>(lbs/gal) | 31 (0.26) |
| Adhesion Strength - Concrete | ASTM D7234 | psi<br>MPa | Exceeds the strength of concrete |

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. This Product Data Sheet is considered accurate and reliable to the best of our knowledge at the date of its publication, but are used as guides only. The user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for performance of the product or for any loss or damage resulting from its use. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole discretion, to repayment of the purchase price of the non-conforming goods.