Product Data Sheet

RCC CORROSION CONTROL

COROGROUT EP
High Strength Epoxy Equipment Grout

PRODUCT DESCRIPTION
COROGROUT EP is a three-component, high performance Epoxy grouting material consisting of resin, hardener and aggregate. **COROGROUT EP** is characterized by a unique balance of critical performance factors that ensure optimum support and long service life for equipment requiring precision alignment and corrosion protection.

GROUTING COMPOSITION
COROGROUT EP is designed with variable fill ratio characteristics to provide versatility in meeting various field grouting application requirements. The standard 1.75 ft^3 (50 l) grout unit incorporating 200 lbs (90.9 kg) of grout aggregate is used for most grouting applications. Aggregate loading can be adjusted to produce higher flow or deeper pour characteristics.

For thin, restricted access or long distance grout pours, a high flow version can be achieved by reducing the amount of aggregate by up to one 50 lb (22.7 kg) bag.

A deep pour version can be achieved by adding one full 50 lb (22.7 kg) bag to the standard grout unit.

FIELDS OF APPLICATION
COROGROUT EP is an ideal epoxy grouting material for rotating equipment and machinery. These include compressors, generators, motors, pumps, machinery base plates and sole plates, crushers, ball mils and crane rails, etc. **COROGROUT EP** can also be used for repair and rebuilding of concrete structures where rapid return to service is desired.

FEATURES
- High early and ultimate strength
- High temperature resistance
- Very good broad based chemical resistance
- Excellent adhesion to concrete and steel
- Good bearing area
- Low creep
- Variable fill ratio
- Deep pour capability
- 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.

Forming
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 the **COROGROUT EP Hardener** into the pail of **COROGROUT EP Resin** and stir well using a slow speed drill motor and paddle mixer. Scrape the sides of container during mixing to ensure hardener is uniformly mixed with the resin.
- Pour resin/hardener mixture into a mortar mixer. Add aggregate 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 mixture 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 EP Resin** to **COROGROUT EP Hardener** is 2:1 by volume.

CONSUMPTION

Grout Description	Weight lb (kg)	Thickness inch (mm)	Yield ft³ (l)
COROGROUT EP Standard Pour Grout			
57 lb (25.9 kg) Unit			
COROGROUT EP Resin	5 (2.27)	2-6 (50-150)	0.44 (12.5)
COROGROUT EP Hardener	2 (0.91)		
COROGROUT Aggregate	50 (22.7)		
228 lb (103.6 kg) Unit			
COROGROUT EP Resin	20 (9.1)	2-6 (50-150)	1.75 (49.6)
COROGROUT EP Hardener	8 (3.6)		
COROGROUT Aggregate	200 (90.9)		
COROGROUT EP High Flow Grout			
178 lb (80.9 kg) Unit		1-2 (25-50)	1.36 (38.5)
COROGROUT EP Resin	20 (9.1)		
COROGROUT EP Hardener	8 (3.6)		
COROGROUT Aggregate	150 (68.2)		
COROGROUT EP Deep Pour Grout			
278 lb (126.3 kg) Unit		> 6 (>150)	2.0 (56.6)
COROGROUT EP Resin	20 (9.1)		
COROGROUT EP Hardener	8 (3.6)		
COROGROUT Aggregate	250 (113.6)		

WORKING TIME

Temperature	COROGROUT EP
50°F (10°C)	120-150 min
70°F (21°C)	90-120 min
90°F (32°C)	50-60 min

CURE TIME (to place in service)

Temperature	To achieve 10,000 psi (69 MPa)
70°F (21°C)	36-48 hrs approx.
90°F (32°C)	16-24 hrs approx.

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 EP Resin	0.5, 2 gal
COROGROUT EP Hardener	0.25, 1 gal
COROGROUT EP 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 EP Resin 24 months
COROGROUT EP Hardener 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
Color			Red or Grey
Density – Standard Pour Unit	ASTM C905-96	lbs/ft³ (kg/m³)	130 (2028)
Compressive Strength	ASTM C 579 Method B	psi (MPa)	Standard Pour: 14,000 (97) High Flow: 11,000 (76)
Tensile Strength	ASTM C307	psi (MPa)	Standard Pour: 2200 (15) High Flow: 2000 (14)
Flexural Strength	ASTM C580	psi (MPa)	Standard Pour: 4500 (31) High Flow: 4000 (28)
Compressive Creep	ASTM C1181-00	in/in	Standard Pour: 4×10^{-3} High Flow: 6×10^{-3}
Bearing Area	ASTM C1339	%	High
Flexural Modulus (tangent)	ASTM C580-02	Psi (Gpa)	Standard Pour: 2×10^{6} (15) High Flow: 1.6×10^{6} (11)

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.