

Technical Bulletin # 617R

Product Description

CHOCKFAST Red is a three-component, high strength, 100% solids, epoxy grouting compound used to grout large machinery and to support soleplates in all types of foundations. CHOCKFAST Red has an extremely high compressive strength. This along with negligible shrinkage makes it ideal for installing critically aligned machinery within very close tolerances.

Use & Benefits

CHOCKFAST Red has the following advantages when compared to conventional cement grouts:

- Impervious to oil
- Cures at least three times as quickly
- No mixing ratios to measure
- Grouts machinery in final aligned position
- High physical strength
- High impact strength
- Resistance to many more chemicals
- Strong bond to metal and concrete
- Unaffected by weathering and freeze / thaw cycling
- Stated physical properties assured
- Superior resistance to fatigue

Design Considerations

CHOCKFAST Red is quick curing, relative to cement grouts, but the cure is thermally gentle. This allows thick pours to be made without causing the stress cracks often associated with a hot-curing epoxy grout. CHOCKFAST Red may be used in thickness greater than 1.25 inches (30mm), however, individual pours should generally not exceed 18 inches (46cm) in thickness and 7 feet (2.2m) in length. When grouting critically aligned machinery coupled to another machine, it is advisable to limit the final leveling pour in accordance with the instructions in Bulletin No. 615 (latest revision).

CHOCKFAST Red contains no diluents that could interfere with the curing mechanism or that could cause material loss during or after cure. Therefore, machinery may be positioned at its final elevation before pouring because the shrinkage is negligible. Critical alignments are maintained during machinery operation due to its high dimensional stability and resistance to creep and vibration.

Application Instructions

CHOCKFAST Red may be mixed with contractor's hoe and wheelbarrow or in a small portable mortar mixer. Pre-condition resin, hardener and aggregate to 65°-80°F (18°-27°C) for 48 hrs. before mixing. Thoroughly mix hardener with resin using a Jiffy Mixing Blade for 3 to 5 minutes then add resin/hardener mix to aggregate. Where a very flowable mix is required the aggregate content may be reduced accordingly. However, in load-bearing areas a maximum reduction to 3-1/2 bags is recommended. Please contact the CHOCKFAST Distributor or ITW Philadelphia Resins if less than 3-1/2 bags are being considered. See Bulletin No. 642 for mixing and installation procedures.

Physical Properties

COMPRESSIVE STRENGTH	15,250 psi (1,072 kg/cm ²)	ASTM C-579 MOD
COMPRESSIVE MODULUS OF ELASTICITY	2,000,000 psi (140,600 kg/cm ²)	ASTM C-579 MOD
LINEAR SHRINKAGE	Not Measurable	ASTM D-2566
COEFFICIENT OF LINEAR THERMAL EXPANSION	11.2 x 10 ⁻⁶ /°F @ 32°F to 140°F (20.1 x 10 ⁻⁶ /°C @ 0°C to 60°C)	ASTM D-696
FLEXURAL STRENGTH	4,025 psi (283 kg/cm ²)	ASTM C-580
FLEXURAL MODULUS OF ELASTICITY	2,000,000 psi (140,600 kg/cm ²)	ASTM C-580
TENSILE STRENGTH	1,890 psi (133 kg/cm ²)	ASTM D-638
IZOD IMPACT STRENGTH	4.6 in.lb/in. (0.02 N.m/mm)	ASTM D-256
SERVICE TEMPERATURE	Up to 140°F (60°C)	
FIRE RESISTANCE	Self-Extinguishing	ASTM D-635
SPECIFIC GRAVITY	2.06	

Product Information

UNIT COVERAGE	1.6 ft ³ or 2,765 in ³ (45.3 Liters)
APPLICATION TEMPERATURE	55°F (13°C) to 95°F (35°C)
UNIT PACKAGING	Resin (NH): 1.6 gal (6.1 L) in a 3 gal pail Hardener (NH): 0.9 gal (3.5 L) in a plastic tray inserted into the top of the resin can Aggregate: (4) 46 lb. (21 kg) bags
UNIT WEIGHT	Resin: 15.4 lbs (7 kg) Hardener: 7.6 lbs (3.4 kg) Aggregate: 184 lbs (84 kg)
SHIPPING WEIGHT	207 lbs (94 kg)
CURE TIME (approximate)	54 hours @ 60°F (16°C) 36 hours @ 72°F (21°C) 24 hours @ 27°C (80°F) 18 hours @ 32°C (90°F)
POT LIFE	Approximately 3 hours @ 21°C (70°F)
SHELF LIFE	2 years in dry storage
CLEAN UP	Water or IMPAX IXT-59 or similar epoxy solvent

Date 06/2006

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