# TECHNICAL BULLETIN

## CHOCKFAST Red
A Deep-Pour Epoxy Grout

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 30mm (1.25"), however, individual pours should generally not exceed 46cm (18") in thickness and 2.2m (7') 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 18°-27°C (65°-80°F) 48 hrs. before mixing. Thoroughly mix hardener with resin first before mixing in 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**: 1,072 kg/cm² (15,250 psi)  
  ASTM C-579 (Modified)
- **COMpressive Modulus of Elasticity**: 140,600 kg/cm² (2,000,000 psi)  
  ASTM C-579 (Modified)
- **LINEar Shrinkage**: Not Measurable  
  ASTM D-2566
- **COEfficient of LINEar Thermal Expansion**: $20.1 \times 10^{-6} / ^\circ C @ 0^\circ C \text{ to } 60^\circ C$  
  ASTM D-696
- **FLEXural Strength**: 283 kg/cm² (4,025 psi)  
  ASTM C-580
- **FLEXural Modulus of Elasticity**: 140,600 kg/cm² (2,000,000 psi)  
  ASTM C-580
- **TENSile Strength**: 133 kg/cm² (1,890 psi)  
  ASTM D-638
- **IZOD IMPACT STRENGTH**: 0.02 N.m/mm (4.6 in.lb/in.)  
  ASTM D-256
- **FIRE RESISTANCE**: Self-Extinguishing  
  ASTM D-635
- **SPECIFIC GRAVITY**: 2.06

### Product Information

- **UNIT PACKAGING**: Resin: 1 - 6.1 L (1.6 gal) slack-filled can  
  Hardener: 1- 3.5 L (0.9 gal) tray of Hardener inserted into the top of the resin can  
  Aggregate: 4 – 21 kg (46 lb.) bags
- **UNIT WEIGHT**: Resin & Hardener: 10.4 kg (23 lbs)  
  Aggregate: 84 kg (184 lbs)  
  Unit Weight: 94 kg (207 lbs)
- **UNIT COVERAGE**: 45.3 Liters (1.6 ft³ or 2,765 in³)
- **CURE TIME (approximate)**: 54 hours @ 16°C (60°F)  
  36 hours @ 21°C (72°F)  
  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

### Reference

For design considerations and application details please request Bulletins No. 615 and 642 or contact ITW Philadelphia Resins' Engineering Services Department.

### Date

03/2004