

Thin Pour, Rapid Cure, High Strength, Epoxy Grout

Technical Bulletin # 618 I

Product Description

CHOCKFAST RED SG is a three component, high strength, 100% solids epoxy grouting compound which is used to grout large machinery and to support soleplates in all types of foundation designs with clearances as little as 1" (25mm). CHOCKFAST RED SG has extremely high physical properties and negligible shrinkage, making it ideal for final positioning of critically aligned equipment within close tolerances. Skid mounted compressors, extruders, turbines, pumps, motors and crane rails are just a few types of equipment supported on CHOCKFAST RED SG. When using CHOCKFAST RED SG for crane rail applications expansion joints may be placed every 10' (3m).

Use & Benefits

CHOCKFAST RED SG has the following advantages when compared to conventional cementitious grouts:

Impervious to oil and chemical attack

Pre-packaged unit

Higher physical strengths

Unaffected by weathering and freeze/thaw cycling

Cures at least three times as quickly

Grout machinery in final aligned position

Strong bond to metal and concrete

Superior resistance to fatigue

CHOCKFAST RED SG contains no non-reactive diluents which could interfere with the curing mechanism or which could cause material loss during or after cure. Machinery may be positioned at its final elevation before pouring because the shrinkage is negligible. Critical alignments are maintained during machinery operation due to CHOCKFAST RED SG's high dimensional stability and resistance to creep and vibration.

Design Considerations

For design considerations and application details, please request Bulletin No. 643 or contact ITW Polymer Technologies' Engineering Services Department.

Application Instructions

CHOCKFAST RED SG may be mixed with a contractor's hoe and wheelbarrow or in a portable mortar mixer. Thoroughly mix hardener with resin first before mixing in aggregate. Where a very flowable mix is required, the aggregate content may be reduced accordingly. Contact the CHOCKFAST Representative or ITW Polymer Technologies when reducing aggregate.

CHOCKFAST RED SG 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 SG may be used in any thickness greater than 1" (25mm); however, individual pours should generally not exceed 4" (100mm) in thickness and 5' (1.5m) in length.

CHOCKFAST RED SG cure rates and flowability will be enhanced somewhat if material temperatures are warmer than the existing ambient conditions listed above. It is always a good idea to keep CHOCKFAST RED SG materials in a well-protected area until the job site is fully prepared for mixing and placement.

NOTE: Standard CHOCKFAST RED is available and allows deep single pours to 18" (450mm) for concrete reconstruction. Please see Bulletins No. 642 and 617.



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Physical Properties

COMPRESSIVE STRENGTH	18,120 psi (1174 kg/cm ²)	ASTM C-579 (MOD)
COMPRESSIVE MODULUS OF ELASTICITY	1.97 x 10 ⁶ psi (138535 kg/cm ²)	ASTM C-579 (MOD)
LINEAR SHRINKAGE	Not Measurable	ASTM D-2566
COEFFICIENT OF LINEAR THERMAL EXPANSION	10.8 x 10 ⁻⁶ /°F @ 32°F to 140°F (19.4 x 10 ⁻⁶ /°C @ 0°C to 60°C)	ASTM D-696
FLEXURAL STRENGTH	4,800 psi (340 kg/cm ²)	ASTM C-580
FLEXURAL MODULUS OF ELASTICITY	2.62 x 10 ⁶ psi (184,200 kg/cm ²)	ASTM C-580
TENSILE STRENGTH	2,130 psi (150 kg/cm ²)	ASTM D-638
IZOD IMPACT STRENGTH	7.2 in.lbs./in. (0.32 Newton m/cm)	ASTM D-258
FIRE RESISTANCE	Self-extinguishing	ASTM D-635
SERVICE TEMPERATURE	Up to 140°F (60°C)	
SPECIFIC GRAVITY	2.24	

Product Information

COVERAGE	1.6 ft ³ (45.3 Liters)
APPLICATION TEMPERATURE	55°F (13°C) to 95°F (35°C)
UNIT PACKAGING	Resin (NH): 2.59 gal (9.05 L) in a 3 gal pail Hardener (H): 0.43 gal (1.63 L) in a 1gal can Aggregate: (4) bags - 46 lb. (21 kg) / bag
UNIT WEIGHT	Resin: 23.3 lbs. (10.6 kg) Hardener: 3.6 lbs. (1.6 kg) Aggregate: 184 lbs (84 kg)
SHIPPING WEIGHT	213 lbs. (96.6 kg)
CURE TIME (approximate)	24 to 48 hours @ 70°F (21°C)
POT LIFE	1 hour @ 70°F (21°C)
CLEAN UP	IMPAX IXT-59 or similar epoxy solvent
SHELF LIFE	Two years in dry storage

Reference

For design considerations and application details please request Bulletin No. 642 or contact ITW Polymer Technologies' Engineering Services Department.

Date

06/2006

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