



## CHOCKFAST® RED SG – THIN POUR, RAPID CURE, HIGH STRENGTH, EPOXY GROUT

REVISED: 10/2023

### TECHNICAL DATA SHEET #618

VERSION: J

#### 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" (25-mm). 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, control or expansion joints should be placed at least every 10' (3m).

#### USE & BENEFITS

Chockfast Red SG has the following advantages when compared to conventional cementitious grouts:

- Impervious to oil and chemical attack
- Cures at least three times as quickly
- Pre-packaged unit
- Grout machinery in final aligned position
- Higher physical strengths
- Strong bond to metal and concrete
- Unaffected by weathering and freeze/thaw cycling
- Superior resistance to fatigue

Chockfast Red SG contains no non-reactive diluents which could interfere with the curing mechanism, or which could cause volumetric 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 refer to Technical Bulletin 1600 or contact your local representative of the Chockfast Worldwide Distributor Network or ITW Performance Polymers.

#### APPLICATION INSTRUCTIONS

Please refer to the appropriate safety data sheet (SDS) prior to using this product.

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.

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 approximately 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" (460-mm) for concrete reconstruction. Please see Technical Data Sheet 617 and

Technical Bulletin 1600 for further information.

area in original unopened containers and within a temperature range of 65°- 95°F (16° - 35°C). For additional information, please refer to Technical Guide 1024.

## STORAGE RECOMMENDATIONS

All product components should be stored in a dry, shaded

## PHYSICAL PROPERTIES

COMPRESSIVE STRENGTH	18,120 psi (124.9 MPa)	ASTM C579(B) MOD*
COMPRESSIVE MODULUS OF ELASTICITY	1.97 x 10 <sup>6</sup> psi (13.6 GPa)	ASTM C579(B) MOD*
COMPRESSIVE STRENGTH – 7 DAY	17,500 (120.7 MPa)	ASTM C579(B)
LINEAR SHRINKAGE	≤ 0.010%	ASTM C531
COEFFICIENT OF LINEAR THERMAL EXPANSION	10.8 x 10 <sup>-6</sup> / °F @ 32°F to 140°F (19.4 x 10 <sup>-6</sup> / °C @ 0°C to 60°C)	ASTM D696
FLEXURAL STRENGTH	4,800 psi (33.09 MPa)	ASTM C580
FLEXURAL MODULUS OF ELASTICITY	2.62 x 10 <sup>6</sup> psi (18.1 GPa)	ASTM C580
TENSILE STRENGTH	2,130 psi (14.69 MPa)	ASTM D638
IZOD IMPACT STRENGTH	7.2 in.lbs./in. (0.32 Newton m/cm)	ASTM D258
BOND - CONCRETE	3,800 psi (26.2 MPa). Concrete Failure	ASTM C882
FIRE RESISTANCE	Self-Extinguishing	ASTM D635
DENSITY	137.66 lbs/ft <sup>3</sup> (2205 kg/m <sup>3</sup> )	
SPECIFIC GRAVITY	2.205	ASTM C905

*The data shown reflect typical results based on laboratory testing under controlled conditions. Variations from the above data are typical for field-prepared samples.*

*\*Cured 24 hours at room temperature, post-cured 4 hours, and conditioned 4 hours at room temperature before evaluation.*

## PRODUCT INFORMATION

UNIT COVERAGE	1.6 ft³, 11.97 gal (0.0453 m³, 45.3 L)	
TYPICAL POUR DEPTH	1 – 4 in (25 - 101 mm)	
TYPICAL APPLICATION TEMPERATURES	55°F to 80°F (13°C to 27°C)	
INITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)	60°F (16°C): 48 hours 70°F (21°C): 24 hours	
POT LIFE (APPROXIMATE)	Approximately 1 hour @ 70°F (21°C)	
PACKAGING PER UNIT	Resin (A):	2.6 gal (9.8 L) in a 3-gal pail
	Hardener (B):	0.4 gal (1.5 L) in a 1-gal can
	Aggregate (C):	(Qty 4) 46 lb. (21 kg) bags
UNIT WEIGHT	Resin (A):	23.3 lb (10.6 kg)
	Hardener (B):	3.6 lb (1.6 kg)
	Aggregate (C):	184 lb (83.5 kg)
UNIT SHIPPING WEIGHT	213 lbs. (96.6 kg)	
CLEAN UP	Water, IMPAX IXT-59, or similar epoxy solvent	
SHELF LIFE	2 years in dry storage	
CHEMICAL RESISTANCE	Refer to Technical Guide 675	

## REFERENCE

For any additional recommendations or applications beyond the typical ones listed in this document, please contact your local representative of our Worldwide Distributor Network or ITW Performance Polymers for further support.

**General:** Every reasonable effort is made to insure the technical information and recommendations on these data pages are true and accurate to the best of our knowledge at the date of issuance. However, this information is subject to change without notice. Prior versions of this publication are invalid with the release of this version. Products and information are intended for use by qualified applicators that have the required background, technical knowledge, and equipment to perform said tasks in a satisfactory manner. Consult your local distributor for product availability, additional product information, and technical support. **Warranty:** ITW Performance Polymers, a division of Illinois Tool Works Inc., warrants that its products meet their printed specifications. This is the sole warranty. This warranty expires one year after product shipment. **Warranty Claims:** If any product fails to meet the above, ITW Performance Polymers will, at its option, either replace the product or refund the purchase price. ITW Performance Polymers will have no other liability for breach of warranty, negligence, or otherwise. All warranty claims must be made in writing within one year of the date of shipment. No other claims will be considered. **Disclaimer:** ITW Performance Polymers makes no other warranty, expressed or implied, and specifically disclaims any warranty of merchantability or fitness for a particular purpose. Suggestions concerning the use of products are not warranties. The purchaser assumes the responsibility for determining suitability of products and appropriate use. ITW Performance Polymers' sole liability, for breach of warranty, negligence or otherwise, shall be the replacement of product or refund of the purchase price, at ITW Performance Polymers' election. Under no circumstances shall ITW Performance Polymers be liable for any indirect, incidental or consequential damages. **Modification of Warranty:** No distributor or sales representative has the authority to change the above provisions. No change in the above provisions will be valid unless in writing and signed by an officer or the Technical Director of ITW Performance Polymers. No term of any purchase order shall serve to modify any provision of this document. **Mediation and Arbitration:** If any dispute arises relating to products or product warranties, either the purchaser or ITW Performance Polymers may a) initiate mediation under the then current Center for Public Resources (CPR) Model Procedure for Mediation of Business Disputes, or b) initiate a non-binding arbitration under the rules of the American Arbitration Association for the resolution of commercial disputes.

## ITW PERFORMANCE POLYMERS

130 Commerce Drive | Montgomeryville | PA 18936 | USA | T: +1-215-855-8450 | E-mail: customerservice.na@itwpp.com | www.itwperformancepolymers.com  
Bay 150 | Shannon Industrial Estate | Shannon | County Clare | Ireland | T: +353 61 771 500 | E-mail: customerservice.shannon@itwpp.com