TECHNICAL BULLETIN

CHOCKFAST Blue

Epoxy Grout for Severe Applications

Bulletin # 616K

Product Description

CHOCKFAST Blue is a two component, pourable epoxy grouting compound that contains aggregate. This highly developed material is used to replace steel soleplates or as an epoxy capping material on foundations where severe conditions exist such as high operating temperatures and corrosive environments.

Use & Benefits

CHOCKFAST Blue's unique properties permit usage directly under highly stressed machinery mounting surfaces. Typical applications include the grouting of diesel engines, compressors, generators, gears, pumps and most other heavy equipment. CHOCKFAST Blue is unexcelled under heavy reciprocating and rotary machinery due to its excellent resistance to creep, fatigue and shock forces. It is also an excellent support surface for the CHOCKFAST Black.

Design Considerations

CHOCKFAST Blue is normally used in a thickness range of 25-38mm (1" to 1-1/2"). Thicker sections can be constructed with CHOCKFAST Blue if proper layering techniques are used. Please contact ITW Philadelphia Resins for additional application instructions.

Long pours should be divided into sections not exceeding 1.1m (3'-6") in length. Longer, thicker or thinner pours are possible, but ITW Philadelphia Resins should be consulted before deciding upon them. The pourable viscosity of the CHOCKFAST BLUE provides for essentially 100% surface contact. Because CHOCKFAST BLUE has negligible shrinkage, final alignment may be set before grouting.

Where foundation temperatures are between 49°-60°C (120°-140°F) during normal engine operation, the static loading on top of CHOCKFAST Blue should not exceed 35 kg/cm² (500 psi). This is practical and achievable for most machinery. Where foundation temperatures are below 49°C (120°F), loading CHOCKFAST Blue up to 140 kg/cm² (2,000 psi) is permissible. However, loading CHOCKFAST Blue over 85 kg/cm² (1,200 psi) should not be attempted without contacting ITW Philadelphia Resins for consultation on the application.

Application Instructions

Precondition both the resin and hardener to 21°-27°C (70°-80°F) for 24 hours before mixing. The hardener should be slowly added to the resin and power mixed until a homogeneous color and texture are apparent. Mixing for 3-5 minutes with a KOL mixer or a large Jiffy mixer blade in a 3/4" drilling machine is usually sufficient.





Physical **Properties**

COMPRESSIVE STRENGTH: 1,336 kg/cm² ASTM C-579

(19,000 psi)

115,300 kg/cm² COMPRESSIVE MODULUS OF ELASTICITY: ASTM C-579

(1,640,000 psi)

0.0001 mm/mm LINEAR SHRINKAGE: **ASTM D-2566**

 0° C to 60° C – 27.7 x 10^{-6} / $^{\circ}$ F COEFFICIENT OF LINEAR THERMAL ASTM D-698

 $(32^{\circ}F \text{ to } 140^{\circ}F - 15.4 \text{ x } 10^{-6}/^{\circ}F)$ EXPANSION:

354 kg/cm² FLEXURAL STRENGTH: ASTM C-580

(4,920 psi)

120,300 kg/cm² FLEXURAL MODULUS OF ELASTICITY: ASTM C-580

 $(1.7 \times 10^6 \text{ psi})$

TENSILE STRENGTH: 225 kg/cm² **ASTM D-638**

(3,156 psi)

IZOD IMPACT STRENGTH: 0.15 N.m/cm ASTM D-256

(3.4 in.lbs/in.)

FIRE RESISTANCE: Self-extinguishing ASTM D-635

SPECIFIC GRAVITY:

Information **Product**

UNIT PACKAGING: 5 gal bucket

26 kg (58 lbs.) / unit **UNIT WEIGHT:** 1,300 cm³ / unit UNIT COVERAGE:

(800 in³ / unit)

36 hours @ 16°C (60°F) CURE TIME (approximate):

24 hours @ 21°C (72°F)) 16 hours @ 27°C (80°F)) 11 hours @ 32°C (90°F)

POT LIFE: 35 to 50 minutes @ 21°C (70°F) SHELF LIFE: Excess of 2 years in dry storage

CLEAN UP: IMPAX IXT-59 or similar epoxy solvent

For design considerations and instalations details please request Bulletin No. 642 or contact ITW Philadelphia Resins' Engineering Services Department.

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