# **Chockfast®**



# CHOCKFAST® BLACK – PREMIUM TWO-COMPONENT EPOXY CHOCKING COMPOUND

**TECHNICAL DATA SHEET #666** 

**VERSION: K** 

**REVISED: 10/2023** 

#### PRODUCT DESCRIPTION

CHOCKFAST Black is a specifically formulated 100% solids, inert filled casting compound developed for use as a chocking material. It is a cost-effective method of maintaining permanent precise alignment of critical equipment. It will withstand severe environments involving high physical and thermal shock.

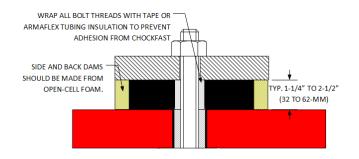
#### **USE & BENEFITS**

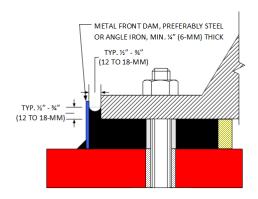
This unique product is used under gas and diesel engines, compressors, generators, turbines, motors, pumps, and various other types of equipment. CHOCKFAST Black is ideal for use under these hot running reciprocating and rotating machines because of its excellent resistance to creep and fatigue at high operating temperatures. It is nonshrinking and has a very high impact and compressive strength. Resin chocks made with CHOCKFAST Black reduce possible bearing or crankshaft damage because they (1) minimize heat build-up on foundations, (2) assure precise alignment and unsurpassed contact with bedplates, and (3) provide a high coefficient of friction to help hold engines down tight. The excellent fluidity of CHOCKFAST Black allows it to fill voids in the chock area and conform to all surface irregularities.

# **DESIGN CONSIDERATIONS**

CHOCKFAST Black was designed to be a thick pour liquid chocking material. A chock depth of 2" (50-mm) is standard; however, thinner, or thicker pours can be made satisfactorily. The 2" (50-mm) chock elevates equipment above the underlying foundation, which allows a free flow of

air thereby reducing possible foundation humping problems. Please contact your local representative of our Worldwide Distributor Network or ITW Performance Polymers for information regarding pours less than 1-1/4" (32-mm) in thickness or greater than 2-1/2" (62-mm) in thickness. Please refer to Technical Guide 692 for further recommendations and guidance on evaluating static load.







### INSTALLATION INSTRUCTIONS

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

Construct a chock mold around one or more anchor bolts using open cell foam damming material on three sides.

Wrap the shank of the anchor bolt with tape, cover with foam pipe insulation or coat with non-melt grease to prevent the CHOCKFAST from sticking to it and to seal the bolt hole. Place a metal dam 1/2" to 3/4" (12-mm to 18-mm) from the mounting pad and seal with caulk. Spray the inside of the mold and front metal dam with Release Agent.

To facilitate mixing and pouring, pre-condition CHOCKFAST

Black such that it is within an ideal temperature of 68° to 77°F (20° to 25°C) at least 24 hours prior to intending to mix and install. Mix and pour the epoxy as directed.

Refer to Technical Guides 612 and 694 for additional recommendations on damming, mixing and pouring.

<u>NOTE</u> - Do not scrape epoxy from the sides or bottom of the container when pouring.

#### STORAGE RECOMMENDATIONS

All product components should be stored in a dry, shaded 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.

## **PHYSICAL PROPERTIES**

COMPRESSIVE STRENGTH	17,300 psi (119.3 MPa)	ASTM D695 MOD*	
COMPRESSIVE MODULUS OF ELASTICITY	800,000 psi (5515.8 MPa)	ASTM D695 MOD*	
LINEAR SHRINKAGE	0.00018 in/in (0.00018 mm/mm)	ASTM D2566	
COEFFICIENT OF LINEAR THERMAL EXPANSION	15.0 X 10 <sup>-6</sup> /°F @ 32°F to 140°F	ASTM D696	
	(27.0 x 10 <sup>-6</sup> /°C @ 0°C to 60°C)	ASTWI D090	
FLEXURAL STRENGTH	6,200 psi (42.8 MPa)	ASTM C580	
FLEXURAL MODULUS OF ELASTICITY	1.4 x 10° psi (9652.7 MPa)	ASTM C580	
TENSILE STRENGTH	2,900 psi (20.0 MPa)	ASTM D638	
SHEAR STRENGTH	5,000 psi (34.5 MPa)	FED-STD-406	
IZOD IMPACT STRENGTH	5.1 in.lbs./in (0.23 N.m/cm)	ASTM D256	
FIRE RESISTANCE	Self-Extinguishing	ASTM D635	
SPECIFIC GRAVITY	1.94		
BARCOL HARDNESS	55 @ Full Cure	ASTM D2583	

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	

TYPICAL POUR DEPTH  1-¼" to 2-½" (32 - 62 mm)  TYPICAL APPLICATION TEMPERATURES  55°F to 95°F (13°C to 35°C)  60°F (15°C): 48 hours  65°F (18°C): 36 hours  CONTACT SURFACE TEMPERATURES)  70°F (21°C): 24 hours  80°F (27°C): 18 hours  POT LIFE (APPROXIMATE)  PACKAGING PER UNIT  RESIN (A): 1.2 gal (4.5 L) in a 2-gal pail  HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle  RESIN (A): 18.2 lbs. (8.3 kg)  HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  COLOR  RESIN (A): BLACK  COLOR  HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  SHELF LIFE  2 years in dry storage  CHEMICAL RESISTANCE	UNIT COVERAGE			265 in <sup>3</sup> (4,343 cm <sup>3</sup> )
MITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)   65°F (18°C): 36 hours   70°F (21°C): 24 hours   80°F (27°C): 18 hours   70°F (21°C): 45 mins.	TYPICAL POUR DEPTH			
INITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)  70°F (21°C): 24 hours 80°F (27°C): 18 hours POT LIFE (APPROXIMATE)  70°F (21°C): 45 mins.  RESIN (A): 1.2 gal (4.5 L) in a 2-gal pail HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle  RESIN (A): 18.2 lbs. (8.3 kg) HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  21 lbs. (9.5 kg)  RESIN (A): BLACK COLOR  HARDENER (B): CLEAR TO AMBER MIXED (A + B): BLACK  CLEAN UP  SHELF LIFE  2 years in dry storage	TYPICAL APPLICATION TEMPERATURES			
INITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)  70°F (21°C): 24 hours 80°F (27°C): 18 hours POT LIFE (APPROXIMATE)  70°F (21°C): 45 mins.  RESIN (A): 1.2 gal (4.5 L) in a 2-gal pail HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle  RESIN (A): 18.2 lbs. (8.3 kg) HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  21 lbs. (9.5 kg)  RESIN (A): BLACK COLOR  HARDENER (B): CLEAR TO AMBER MIXED (A + B): BLACK  CLEAN UP  SHELF LIFE  2 years in dry storage		60°F (15°C): 48 hours		
CONTACT SURFACE TEMPERATURES)         70°F (21°C): 24 hours           80°F (27°C): 18 hours           POT LIFE (APPROXIMATE)         70°F (21°C): 45 mins.           PACKAGING PER UNIT         RESIN (A): 1.2 gal (4.5 L) in a 2-gal pail           HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle         RESIN (A): 18.2 lbs. (8.3 kg)           COMPONENT WEIGHTS         18.2 lbs. (8.3 kg)           UNIT SHIPPING WEIGHT         21 lbs. (9.5 kg)           RESIN (A): BLACK         RESIN (A): BLACK           COLOR         HARDENER (B): CLEAR TO AMBER           MIXED (A + B): BLACK         IMPAX IXT-59 Solvent or equal           SHELF LIFE         2 years in dry storage				
POT LIFE (APPROXIMATE)  PACKAGING PER UNIT  RESIN (A): 1.2 gal (4.5 L) in a 2-gal pail  HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle  RESIN (A): 18.2 lbs. (8.3 kg)  HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  RESIN (A): BLACK  COLOR  HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  IMPAX IXT-59 Solvent or equal  SHELF LIFE  2 years in dry storage				
PACKAGING PER UNIT  RESIN (A): 1.2 gal (4.5 L) in a 2-gal pail  HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle  RESIN (A): 18.2 lbs. (8.3 kg)  HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  21 lbs. (9.5 kg)  RESIN (A): BLACK  COLOR  HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  SHELF LIFE  2 years in dry storage		80°F (27°C): 18 hours		
PACKAGING PER UNIT  HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle  RESIN (A): 18.2 lbs. (8.3 kg)  HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  21 lbs. (9.5 kg)  RESIN (A): BLACK  COLOR  HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  IMPAX IXT-59 Solvent or equal  SHELF LIFE  2 years in dry storage	POT LIFE (APPROXIMATE)	70°F (21°C): 45 mins.		
HARDENER (B): 11.5 oz (0.34 L) in a 16-oz plastic bottle  RESIN (A): 18.2 lbs. (8.3 kg)  HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  21 lbs. (9.5 kg)  RESIN (A): BLACK  COLOR  HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  SHELF LIFE  2 years in dry storage	PACKAGING PER UNIT	RESIN (A):	1.2 gal (4.5 L) in a 2-gal pail	
COMPONENT WEIGHTS  HARDENER (B): 0.76 lbs. (0.35 kg)  21 lbs. (9.5 kg)  RESIN (A): BLACK  COLOR  HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  IMPAX IXT-59 Solvent or equal  SHELF LIFE  2 years in dry storage		HARDENER (B):	11.5 oz (0.34 L) in a 16-oz plastic bottle	
HARDENER (B): 0.76 lbs. (0.35 kg)  UNIT SHIPPING WEIGHT  21 lbs. (9.5 kg)  RESIN (A): BLACK  COLOR  HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  IMPAX IXT-59 Solvent or equal  SHELF LIFE  2 years in dry storage	COMPONENT WEIGHTS	RESIN (A):	RESIN (A): 18.2 lbs. (8.3 kg)	
RESIN (A): BLACK  COLOR HARDENER (B): CLEAR TO AMBER  MIXED (A + B): BLACK  CLEAN UP  IMPAX IXT-59 Solvent or equal  SHELF LIFE  2 years in dry storage		HARDENER (B):	HARDENER (B): 0.76 lbs. (0.35 kg)	
COLOR HARDENER (B): CLEAR TO AMBER MIXED (A + B): BLACK  CLEAN UP IMPAX IXT-59 Solvent or equal SHELF LIFE 2 years in dry storage	UNIT SHIPPING WEIGHT			21 lbs. (9.5 kg)
MIXED (A + B): BLACK  CLEAN UP  IMPAX IXT-59 Solvent or equal  SHELF LIFE  2 years in dry storage	COLOR	RESIN (A): BLACK		
CLEAN UP  SHELF LIFE  IMPAX IXT-59 Solvent or equal 2 years in dry storage		HARDENER (B): CLEAR TO AMBER		
SHELF LIFE 2 years in dry storage		MIXED (A + B): BLACK		
	CLEAN UP	IMPAX IXT-59 Solvent or equal		
CHEMICAL RESISTANCE Refer to Technical Guide 675	SHELF LIFE	2 years in dry storage		

# **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.

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