



## ESCOWELD® 7505E/7530 – HIGH STRENGTH, VERY FLUID, 3-PART EPOXY GROUT

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### TECHNICAL DATA SHEET #1612

VERSION: H

#### PRODUCT DESCRIPTION

ESCOWELD 7505E/7530 is a highly flowable, epoxy grout system engineered for use with dynamically operated industrial machinery and equipment where performance and operating reliability are crucial. ESCOWELD grout functions as a critical interface between the equipment and its foundation ensuring proper transference of static and dynamic loads generated by operating equipment to the foundation. This allows the foundation to efficiently absorb and dissipate the loads true to its purpose.

ESCOWELD Epoxy Grout provides proper support for the operating equipment. When coupled with a properly designed anchoring system, ESCOWELD grout maintains critical shaft alignment fundamental for optimum performance of rotating and reciprocating equipment.

ESCOWELD 7505E/7530 also offers improved resistance to many industrial chemicals that would typically destroy conventional cement grouts. A foundation too, is subject to chemical attack. If the foundation mass is reduced by a chemical attack, so is its effectiveness as a support and damping mechanism. Using guidelines available from ITW Performance Polymers, ESCOWELD grout can also be used to protect concrete foundations from chemical attacks that would otherwise deteriorate as a result.

#### USE & BENEFITS

The key to the performance of ESCOWELD 7505E/7530 is the combination of ESCOWELD 7505E, a versatile liquid epoxy resin/hardener system, with ESCOWELD 7530, an engineered silica aggregate blend specifically designed for greater flowability, strength, and high-flow characteristics.

Other unique features and benefits that have been offered for over 30 years with ESCOWELD 7505E/7530 include:

- Excellent adhesion for steel and concrete.
- Excellent adhesion to itself without surface preparation to simplify multiple pour projects.
- Wide range of depth of pour, from 1-1/2" to 18". This simplifies and speeds up many jobs that would otherwise have required multiple pours and additional surface preparation.
- Cures in 24 hours which is especially valuable during tight turn-around schedules or emergency repairs.
- Exceptional dimensional stability as well as excellent resistance to chemical and physical degradation.
- Negligible shrink on cure.
- Low exotherm material.

#### 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.

The performance of any epoxy machinery grout system depends not only on the engineering and physical characteristics of the cured grout but also on the quality of the mixing and installation. Proper mixing of all components is particularly important in obtaining the maximum strength and adhesive characteristics of epoxy grouts.

- The liquid components for a standard 5-bag unit of ESCOWELD 7505E are packaged in a single can. The lower portion contains the Epoxy Resin, and the upper portion contains the hardener. Pour the entire contents of the hardener into the Epoxy Resin container and mix properly.
  - Mix ESCOWELD 7530 aggregate into combined liquid components in a wheelbarrow or mechanical mixer (mortar/plaster mixer) until all dry particles are wetted out.
- Please contact your local representative of our Worldwide

Distributor Network or ITW Performance Polymers for any questions or support, such as considering the reduction in aggregate used.

## 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 – POST-CURED	14,000 psi (96.5 MPa) (Actual field strength may vary from 10,000 to 14,000 psi depending on curing and testing conditions)	ASTM C579(B) MOD*
COMPRESSIVE MODULUS OF ELASTICITY	1.8 x 10 <sup>6</sup> psi (12,410 MPa)	ASTM C579(B) MOD*
COMPRESSIVE STRENGTH – 7 DAY	12,300 psi (84.8 MPa)	ASTM C579(B)
LINEAR SHRINKAGE	≤ 0.044%	ASTM C531
FLEXURAL STRENGTH	4,700 psi (32.4 MPa)	ASTM C580
FLEXURAL MODULUS	1.8 x 10 <sup>6</sup> psi (12,410 MPa)	ASTM C580
EFFECTIVE BEARING AREA	High (Greater than 85%)	ASTM C1339
COEFFICIENT OF LINEAR THERMAL EXPANSION	14.6 x 10 <sup>-6</sup> / °F @ 32°F to 140°F (26.2 1 x 10 <sup>-6</sup> / °C @ 0°C to 60°C)	ASTM C531
LINEAR SHRINKAGE	≤0.044%	ASTM C531
BOND - CONCRETE	2,100 psi (14.5 MPa). Concrete Failure	ASTM C882
FIRE RESISTANCE	Self-Extinguishing	ASTM D635
DENSITY	125.0 lb/ft <sup>3</sup> (2,002.3 kg/m <sup>3</sup> )	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	5-bag unit: 2.4 ft <sup>3</sup> or 17.95 gal (0.068 m <sup>3</sup> or 67.96 L) 1-bag unit: 0.48 ft <sup>3</sup> or 3.6 gal (0.014 m <sup>3</sup> or 13.6 L)	
TYPICAL POUR DEPTH	1.5 – 18 in (38 – 457 mm)	
TYPICAL APPLICATION TEMPERATURES	55°F to 95°F (13°C to 35°C)	
INITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)	60°F (16°C) – 48 hours 70°F (21°C) – 36 hours 80°F (27°C) – 24 hours 90°F (32°C) – 12 hours	
POT LIFE (APPROXIMATE)	Approximately 2 Hours @ 77°F (25°C)	
PACKAGING PER UNIT (5-BAG UNIT)	Resin (A):	2.6 gal (9.8 L) in a 5-gal bucket
	Hardener (B):	1.2 gal (4.6 L) in a plastic tray inserted into the top of the resin can
	Aggregate (C):	(Qty 5) 53 lb. (24 kg) bags
PACKAGING PER UNIT (1-BAG UNIT)	Resin (A):	0.52 gal (1.96 L) in a 1-gal can
	Hardener (B):	.21 gal (0.81 L) in a ½-gal can
	Aggregate (C):	(Qty 1) 53 lb. (24 kg) bags
UNIT WEIGHT (5-BAG UNIT)	Resin (A):	25.7 lbs (11.7 kg)
	Hardener (B):	10.2 lbs (4.6 kg)
	Aggregate (C):	265 lbs (120 kg)
UNIT SHIPPING WEIGHT (5-BAG UNIT)	305 lbs (138 kg)	
UNIT WEIGHT (1-BAG UNIT)	Resin (A):	5.1 lbs (2.3 kg)
	Hardener (B):	2.1 lbs (0.95 kg)
	Aggregate (C):	53 lbs (24.0 kg)
UNIT SHIPPING WEIGHT (1-BAG UNIT)	64 lbs (29 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.

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