

Technical Bulletin # 610N

### Bulletin Description

This bulletin compares the key physical properties and associated product information of the major 3-component epoxy grouts within the ITW Performance Polymers product offerings.

### Physical Properties

	CHOCKFAST RED	CHOCKFAST RED SG	ESCOWELD 7505E/7530	CHOCKFAST RED HF
TECHNICAL BULLETIN	617	618	1612	1040
COMPRESSIVE STRENGTH ASTM C-581 (MOD)	15,250 psi (105 MPa)	18,120 psi (124.9 MPa)	14,000 psi (96.5 MPa)	13,900 psi (95.8 MPa)
COMPRESSIVE MODULUS OF ELASTICITY ASTM C-582	2,000,000 psi (13,793 MPa)	1,970,000 psi (13,582 MPa)	1,800,000 psi (12,411 MPa)	1,600,000 psi (11,000 MPa)
LINEAR SHRINKAGE ASTM D-2568	Not Measurable	Not Measurable	0.036% (0.00036 in/in)	Not Measurable
COEFFICIENT OF LINEAR THERMAL EXPANSION 0°C-60°C (32°F- 140°F) ASTM D-698	11.2 X 10 <sup>-6</sup> in/in/ °F (20.1 X 10 <sup>-6</sup> cm/cm/ °C)	10.8 X 10 <sup>-6</sup> in/in/ °F (19.4 X 10 <sup>-6</sup> cm/cm/ °C)	14.6 x 10 <sup>-6</sup> in/in/°F (25.2 X 10 <sup>-6</sup> cm/cm/ °C)	19.1 x 10 <sup>-6</sup> in/in/°F (34.4 x 10 <sup>-6</sup> mm/mm/°C)
FLEXURAL STRENGTH ASTM C- 582	4,025 psi (27.7 MPa)	4,800 psi (33 MPa)	4,700 psi (32.4 MPa)	5,200 psi (35.9 MPa)
FLEXURAL MODULUS OF ELASTICITY ASTM C-582	2 X 10 <sup>6</sup> psi (13,793 MPa)	2.62 X 10 <sup>6</sup> psi (18,060 MPa)	-	1.55 x 10 <sup>6</sup> psi (10,700 MPa)
TENSILE STRENGTH ASTM D-640	1,832 psi (12.6 MPa)	2,130 psi (14.6 MPa)	2,100 psi (14.5 MPa)	2,900 psi (20.0 MPa)
IZOD IMPACT STRENGTH ASTM D-258	4.6 in.lb/in (0.02 N.m/mm)	-	-	-
FIRE RESISTANCE ASTM D-637	Self-Extinguishing	Self-Extinguishing	Self-Extinguishing	Self-Extinguishing
SPECIFIC GRAVITY	2.06	2.24	2.00	2.05

### Product Information

	CHOCKFAST RED	CHOCKFAST RED SG	ESCOWELD 7505E/7530	CHOCKFAST RED HF
COVERAGE PER UNIT	1.6 ft <sup>3</sup> (45.3L)	1.6 ft <sup>3</sup> (45.3L)	2.4 ft <sup>3</sup> (68L)	2.51 ft <sup>3</sup> (70.99L)
MAXIMUM POUR DEPTH	18 in (450 mm)	4 in (100 mm)	18 in (450 mm)	4 in (100 mm)
CURE TIME (approximate)	54 hrs. @ 60°F (16°C) 36 hrs. @ 72°F (21°C) 24 hrs. @ 80°F (27°C) 18 hrs. @ 90°F (32°C)	24 to 48 hours @ 70° F (21° C)	48 hrs. @ 60°F (16°C) 36 hrs. @ 72°F (21°C) 24 hrs. @ 80°F (27°C) 12 hrs. @ 90°F (32°C)	54 hrs. @ 60°F (16°C) 36 hrs. @ 72°F (21°C) 24 hrs. @ 80°F (27°C) 18 hrs. @ 90°F (32°C)
POT LIFE	3 hours	1 hour	2 hours	2.5 hours
CLEAN UP	Water	Water	Water	Water
PACKAGING PER Unit	Resin: 1.6 gal. (6.1 L) Hardener: 0.9 gal. (3.4 L) 4 Bags Aggregate 46 lb. (21 kg)	Resin: 2.4 gal (9.05 L) Hardener: 0.43 gal (1.63 L) 4 Bags Aggregate 46 lb. (21 kg)	Resin: 2.57 gal (9.7 L) Hardener: 1.12 gal (4.2 L) 5 Bags Aggregate 53 lb (24 kg)	Resin: 7.1 gal (26.9 L) Hardener: 2.64 gal (9.99 liters) 5 Bags Aggregate 50 lb (18.4 kg)
UNIT WEIGHT	207 lbs. (94 kg)	207 lbs. (94 kg)	305 lbs. (138 kg)	338 lbs. (153 kg)
SHELF LIFE	2 yrs. dry storage	2 yrs. dry storage	2 yrs. dry storage	1 yr. dry storage

**NOTE:** The physical properties quoted above are for laboratory prepared specimens. Tests on specimens from a job site may not be identical.

**Date** May 2018

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