

**DIRECTIONS FOR USE**

Proper surface preparation is essential to the success and performance of any epoxy application. The application surface should be clean, dry, free from oils and rough.

1. Remove all oils, dirt and grease by means of a strong cleaner/degreaser (Devcon Cleaner Blend 300 is suitable for this process).
2. Roughen the surface by grit blasting (8-40 mesh grit) or grinding. A 3-5 mil profile is desired for most applications.
3. All abrasive preparation should be followed by another cleaning to remove any remnants from that process.
4. Ideal application temperature is 55-90 °F. Under cold conditions, heating the repair area to 100-110 °F is recommended.

**Putty Instructions:**

- Add hardener to resin and mix thoroughly with a screwdriver or putty knife until a uniform, streak-free consistency is obtained (about 4 minutes).
- Spread mixed material over the repair area and work firmly into the substrate to ensure maximum surface contact.
- To bridge large gaps or holes use fiberglass tape, expanded metal mesh or mechanical fasteners.

**Liquid Instructions:**

- Add hardener to resin and mix thoroughly with a screwdriver or putty knife until a uniform, streak-free consistency is obtained (about 4 minutes).
- Spread mixed material over the repair area and work firmly into the substrate to ensure maximum surface contact.
- Brush a thin coat of epoxy onto substrate to be duplicated.
- Pour epoxy in a fine stream to avoid entrapping air.
- Do not pour epoxy in sections greater than 1" at a time. Allow material to set up and cool before pouring additional thicknesses.
- To accelerate the curing time, heat cure for 4 hours at 200 °F after curing at room temperature for 2 1/2 hours.

**Machining:**

- Ready to machine when you cannot indent your fingernail into the surface.
- Lathe speed: 150 ft/min
- Cut: Dry
- Tools: Carbide or high speed steel bits
- Feed rate (rough): 1/2"-3" @ .020 cut/rev
- Feed rate (finishing): 1/2" @ .0101 cut/rev
- Polishing: Use 400-650 emery paper wet. Material should polish to a 25-50 micron finish.

Product	Pot Life @ 75 °F (23.8 °C) (min)	Functional Cure @ 75 °F (23.8 °C) (hrs)	Full Cure @ 75 °F (23.8 °C) (hrs)	Mix Ratio by Weight	Mix Ratio by Volume	Color	Coverage / lb. Sq. in. @ 1/4"	Temperature Rating °F / °C
Aluminum Liquid (F-2)	75	16	24	9 / 1	5 / 1	A	70	250 / 121.1
Aluminum Putty (F)	60	16	24	9 / 1	4 / 1	A	70	250 / 121.1
Bronze Putty (BR)	35	16	24	9 / 1	3 / 1	Br	50	250 / 121.1
Brushable Ceramic (R / B)	40	16	24	5.6 / 1	3.4 / 1	R, B	7.6 sq. ft. @ 0.015"	350 / 176.6
Brushable Ceramic (W)	21	16	24	8.5 / 1	5.6 / 1	W	7.6 sq. ft. @ 0.015"	350 / 176.6
Ceramic Repair Putty	25	16	24	7 / 1	4.3 / 1	DB	66	350 / 176.6
FasMetal™	4	1	16	1.07 / 1	1 / 1	G	69	250 / 121.1
Plastic Steel® 5 Min® Putty (SF)	5	1	16	1.7 / 1	1 / 1	DG	49	200 / 93.3
Plastic Steel® Liquid (B)	45	16	24	9 / 1	3 / 1	DG	52	250 / 121.1
Plastic Steel® Putty (A)	45	16	24	9 / 1	2.5 / 1	DG	48	250 / 121.1
Stainless Steel Putty (ST)	58	16	24	11 / 1	3.75 / 1	G	50	250 / 121.1
Titanium Putty	21	16	24	4.3 / 1	3 / 1	G	47	350 / 176.6
Underwater Repair Putty (UW)	45	16	24	1.4 / 1	1 / 1	G	68	250 / 121.1
Wear Resistant Epoxy (WR-2)	60	16	24	9 / 1	4 / 1	DG	56	250 / 121.1

**KEY:** DG=Dark Grey, G=Grey, Br=Bronze, A=Aluminum, W=White, DB=Dark Blue, R=Red, B=Blue

Technical Data Sheet available at [www.itwperformancepolymers.com](http://www.itwperformancepolymers.com). For technical assistance, please call 855-489-7262.

**Precaution:** Use in accordance with Material Safety Data Sheet.

**WARRANTY:** DUE TO VARIATIONS IN THE STORAGE, HANDLING AND APPLICATION OF THESE MATERIALS, ITW PERFORMANCE POLYMERS MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, CONCERNING THEIR PERFORMANCE AND SHALL NOT ACCEPT LIABILITY FOR THE RESULTS OBTAINED. SEE OUR FULL WARRANTY IN OUR TERMS AND CONDITIONS OF SALE AT [WWW.ITWPOLYMERS.COM](http://WWW.ITWPOLYMERS.COM).

**Warning:** For Industrial Use Only.