

SPECIAL PURPOSE EPOXIES

For Unique Applications

450°F - BOND-IT 7056AL

Machinable Instant Metal

Bond-IT 7056AL is a super fast setting, machinable, repair epoxy.

No weighing, mixing or mess. Will not run, drip or sag when applied.

Just dispense from a hand held, side by side dispenser tube. 7056AL cures in 4-8 minutes, at room temp., without any objectionable or sulphur odors.

Bond-IT has excellent adhesion to smooth, rough or porous surfaces, most plastics, metals, ceramics, glass, wood and cures to form a hard, durable, machinable epoxy that can be machined, tapped or drilled.

Bond-IT 7056AL repairs, rebuilds and assembles components; rebuilds surfaces and even fills gaps or voids.

This unique, machinable, repair epoxy makes repairs a breeze without the odors of 5 minute repair epoxies or the sticky fingers obtained with cyanoacrylates.

Bond-IT 7056AL. . . 2 oz. Applicator Kit

400°F - BOND-IT 7040

"Superbonder"

Bond-IT 7040 is formulated with specialty adhesion promoters and easily forms bonds that have strengths up to 5,000 psi.

Just mix and apply. Bonds to most metals, plastics, composites, glass, ceramics, dissimilar materials etc. Cures at room temp. to form a high strength bond with excellent chemical resistance.

Users Report:

- Bonds ceramic wear tips to aluminum for a high speed textile production application.
- Bonds stainless steel brackets to stainless steel housings with tensile shear strengths measuring up to 5,000 psi.

Applications Include bonding ceramics to metals, brake pads to metals, assembling and repairing machines, et.

Commonly used in automotive, aerospace, equipment or production applications.

Bond-IT 7040-4. . . . Applicator kit

500°F - DURALCO 4540

Liquid Metal

Duralco™ 4540 is filled with ultra fine, aluminum metal powder creating a pourable liquid that easily penetrates fine openings, fills gaps and voids, seals, patches and repairs.

Just mix, apply and cure at room temperature for outstanding adhesion, ductility, thermal conductivity and shock resistance.

4540 is machinable and rugged. It is resistant to chemicals and solvents and can be used to 500°F.

Users Report:

- 4540 was used to cast integrally heated molds for injection molding of plastic parts.
- 4540 formed highly detailed parts with high thermal conductivity, durability and wear resistance.

Applications Include: repairing leaks, solder joints, cracks, holes, castings, heating elements, cooling coils, high temp instruments, etc.

Duralco 4540-1. . . . Pint kit



Bond-IT 7056AL Fills a Casting Before Re-Machining



Bond-IT 7040 Bonds Ceramic Wear Tips to Aluminum Holders



Duralco 4540 Bonds Heater Element To an Aluminum Tray

PRODUCT	7056AL	7040	4540
Maximum Temp (°F)	450	400	500
Density (gm/cc)	1.5	1.05	1.9
Viscosity (cps)	40,000	10,000	30,000
Hardness (Shore D)	65	75	80
Tensile Strength (psi)	10,000	8,000	10,000
Thermal Conductivity BTU-in/hr. °F Ft. ²	20	7.5	35
Thermal Expansion (10 ⁻⁵ /°C)	3.4	6.4	8.0
Dielectric Strength (volts/mil)	100	500	1000
Volume Resistivity (ohm-cm)	10 ⁸	10 ¹⁴	10 ⁸
Elongation %	3.0	3.0	1.2
Thermal Stability % (1000 hr. @ 200 °C)	0.3	0.3	0.5
Shrinkage (% max.)	0.3	0.5	0.1
Moisture Absorption % (30 days @ 50 °C)	0.5	0.1	0.2
Components Color	2-Silver	2-White	2-Silver
Mix Ratio (R/H)	N/A	100/30	100/9
Cure	4-8 min.	4-16 hrs. 30 min.@ 250°F	16 hrs. 30 min.@ 250°F