

# SPECIAL PURPOSE EPOXIES

For Unique Applications

## 450°F - BOND-IT™ 7056AL

### Machinable Instant Metal

Bond-IT 7056AL is a unique, super fast, machinable, repair epoxy. It does not have the odors of a 5 minute repair epoxy and will not give you sticky fingers like cyanoacrylates.

This super fast epoxy makes repairs a breeze.

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.

**Applications include** repairs, rebuilds and assembles parts, components; rebuilds surfaces and even fills gaps or voids.

Cat. No.	Description
Bond-IT 7056AL-1.....	2 oz. Applicator Kit
Bond-IT 7056AL-2.....	8 oz. 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, instruments, etc.

Cat. No.	Description
Duralco 4540-1.....	Pint Kit
Duralco 4540-2.....	Gallon Kit

## 500°F - DURALCO™ T507

### Teflon Paint

Duralco T507 Teflon paint cures to form a non-stick layer of Teflon that is usable up to 500°F.

It was primarily designed to create non-stick surfaces with exceptional durability due to its composite structure.

Just mix the resin with its hardener and apply. Duralco T507 cures at room temperature and can be used up to 500°F.

Duralco T507 has excellent resistance to high humidity and saline atmospheres, fuel gas exhaust, corrosive environments, organic solvents and galvanic protection.

It is commonly used on powder shutes, assembly lines, heat release films, reusable mold release, factory equipment, etc.

Ideal for processing equipment, OEM applications, etc.

Cat. No.	Description
Duralco T507-1.....	Pint Kit
Duralco T507-2.....	Quart Kit



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



Duralco 4540 Bonds Heater Element to an Aluminum Tray



Duralco T507 Teflon Coats a High Temp. Feeder Trough

PRODUCT	7056AL	4540	T507
Maximum Temp	450°F	500°F	500°F
Density (gm/cc)	1.50	1.52	1.40
Mixed Viscosity (cps)	11,000	20,000	10,000
Hardness (Shore D)	65	80	68
Tensile Strength (psi)	10,000	10,000	5,000
Thermal Conductivity (BTU-in/Hr. Ft <sup>2</sup> °F)	20	35	10
Thermal Expansion (10 <sup>-5</sup> /°C)	3.40	4.10	4.20
Dielectric Strength (volts/mil)	100	100	400
Volume Resistivity (ohm-cm)	10 <sup>8</sup>	10 <sup>8</sup>	10 <sup>14</sup>
Elongation %	3.00	1.20	3.00
Thermal Stability % (1000 hr. @ 200 °C)	0.30	0.50	0.50
Shrinkage (% max.)	0.30	0.10	0.50
Moisture Absorption % (30 days @ 50 °C)	0.50	0.20	0.20
Components - Color	2-Silver	2-Silver	2-Tan
Mix Ratio (R/H)	N/A	100/9	100/15
Cure @ R.T.	4-8 min.	4-16 hrs.	4-16 hrs.
Cure @ 250°F		8 min.	30 min.