

TECHNICAL DATA SHEET

Methacrylate Structural Bonder

LIONBOND™ TTC-9300A/B

LIONBOND™ TTC-9300 Series Methacrylate Adhesives are high strength two component products for bonding metals, plastics and composites. They offer a unique combination of convenient 1:1 mix ratio and ability to adhere to a wide variety of materials. Most metals, including steel and aluminum, can be bonded without surface pretreatment. A choice of 3, 6, 13 and 40 minute working times, fast cure and rapid strength build make this series of adhesives an ideal first choice for diverse bonding applications. Packaging options include 25ml syringes, 50 and 400 ml cartridges and in 19 and 189 liter (5 and 50 gallon) bulk containers for application with meter-mix dispense equipment.

Key Properties

- Fast cure in room temperature
- 1:1 easy mix ratio
- Good resistance to dynamic loading
- Well bonding strength on various substrate

Characteristics

	Part A	Part B	Mix (Part A + B)
Color	Off White	Amber	Amber
Mix ratio by volume	1	1	—
Mix ratio by weight		1	—
Density, g/cc	0.96	0.97	0.97
Density, lb/gallon	8.01	8.09	8.09
Viscosity, cps	30,000 – 100,000	50,000 – 120,000	—

TYPICAL PHYSICAL PROPERTIES @ 24°C (75°F)

Tensile Strength MPa (psi)	31 -32 (4,500 – 4,600)	Lap Shear Strength ⁴ MPa (psi)	20 -25
Maximum Tensile Elongation (%)	6 – 7	Service Temperatures °C (°F)	-40°C to 180°C
Tensile Modulus ³ MPa (psi)	938- 966	Working Time (minutes)	5-7
		Fixture Time (minutes)	10-12

RECOMMENDED SUBSTRATE

Composites	Metals ²	Thermoplastics ¹
✓ Epoxy laminates	✓ Aluminum	✓ ABS, Acrylics
✓ FRP (Polyester / Vinyl Ester)	✓ Carbon Steel	✓ Vinyl
✓ Gelcoats	✓ Stainless Steel	✓ PVC, Polycarbonates

1. Polyolefins, thermoplastic polyesters, fluorocarbon plastics and other low energy plastics are not suitable.
2. Prepare metal by removing dust, loose scale, rust and other surface residue including oil and grease. For maximum bond strength on steel, abrade surface prior to bonding. See important notes a, b and c on reverse side.

Storage

The resin and hardener should be stored in a dry place at 5-25°C. Reseal container After use.