

Technical Data Sheet

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Magnobond 7500 A/B Magnolia 7500 A/B

Description

Magnobond 7500 A/B is a two-part, low viscosity epoxy resin/adhesive having good peel strength, high temperature properties and a long pot-life. After setting-up at room temperature, Magnobond 7500 A/B must be cured at 200^o F for one to two hours to complete the cure.

General Uses:

Magnobond 7500 A/B is often used with dry glass or carbon fiber as a wet lay-up resin for composite structure reinforcement and construction. Other adhesive applications include:

- Wet lay-up and Composite-to-Composite bonding
- Metal and/or Composite repair
- Structural adhesive bonding in areas that require flexibility and good vibration resistance
- Can be used for resin transfer molding (RTM) applications

Features:

- Excellent tensile lap shear and peel at wide range of temperatures
- Good physical properties in excess of 250° F
- Excellent chemical, moisture and environmental resistance
- 100% solids (does not contain any solvents)
- Long pot-life (3 ½ to 4 hours)
- Can be meter mixed and dispensed (with agitation of the Part B)
- Magnobond 7500 A/B Part A is an off white in color paste. Part B is an amber liquid.

Properties

Property	Magnobond 7500 A/B
Cure Schedule	18 Hours @ Room Temperature Plus 2 Hours @ 200° F
Mix Ratio - Parts By Weight (Part A : Part B) Parts By Volume (Part A : Part B)	100:46 2:1
Pot Life, 3 ounces	> 3 Hours
*Shelf Life (Part B must be mixed prior to mixing with Part A).	Part A: 12 Months at 75°F Part B: 12 Months at 75°F
Specific Gravity	Part A: 1.1 Part B: 1.0 Mix: 1.1
Viscosity @ 77 °F	A: (6/10) 21,000 cps B: (3/10) 450 cps Mix: (6/10) 3,200 cps

Typical Cured Properties	(after 1 to 2 hours at to 200º F	7)*

	Cure 2 hrs at 200F
ASTM D 1002 Lap shear Strength (psi) 2024 T-3 Aluminum FPL Etch at: - 67° F 75° F 180° F 250° F 300° F 400° F	3,500 4,000 2,750 1,500 900 400
ASTM D 1002 Tensile Lap Shear Strength (psi) @ RT after Soak for 7 Days	
Jet A Fuel MIL H 83282 MIL L 7808J MIL H 5606 MIL L 23699	4,000 4,000 4,000 4,000 4,000
ASTM D 1002 Tensile Lap Shear Strength (psi) at:	
RT after 30 day soak @125F / 85% humidity 180Fafter 30 day soak @125F/ 85% humidity	4,000 2,500
ASTM D 1876 T-peel Strength (pli) at: RT 180° F RT after 7 days in Jet A fuel @ RT RT after 7 days in MIL H 83282 @ RT RT after 7 days in MIL H 83282 @ RT	10 15 15 15
RT after 7 days in MIL H 5606 @ RT RT after 7 days in MIL L 7808J @ RT RT after 7 days in MIL L 23699 @ RT RT after 30 day soak @125F / 85% humidity 180F after 30 day soak @125F / 85% humidity	15 15 15 15 15

Other Typical Cured Properties and Information

Coefficient of thermal expansion (Magnolia Plastics LWR 07-4957):

• 76x10⁻⁶ in./in./°C

Compressive strength at RT $(0.5 \times 0.5 \times 1.0 \text{ cured at } 200^{\circ}\text{F})$:

- Ultimate: 10,000 psi
- Compressive Modulus: 300,000

Other cured physical properties:

- Ultimate Flexural Strength (psi): 9,717
- Ultimate Tensile Strength (psi): 6,062
- Tensile Modulus (psi): 301,156
- Elongation, %: 3.5

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