

MAX EMC A/B

Epoxy Molding Compound

Modeling and Tooling Compound
Clay or Dough-Like Consistency
Cures To A Hard Ceramic-Like Texture
Marine and Aircraft Composite Repair and Fabrication
Electronic Potting, Insulating, Encapsulating
Honeycomb Edge Closeout
Filleting Compound
Lightweight Bonding Adhesive
Surface Repairs

- Non-Critical Mix Ratio Easy 1:1 Parts by Volume, Just Knead Together By Hand
- 2-Hour Working Time And Will Set Up Overnight
- Moldable Clay-like Consistency That Can Be Rolled, Shaped and Sculpted To Shape
- Sandable, Drill and Tapped, Carved, Machined, Painted
- Excellent Adhesion To Epoxy, Polyester or Vinyl Ester Fiberglass For Repairing Hulls
- Excellent Adhesion To Aluminum, Steel, Concrete/Ceramic, Wood and Composites
- Lightweight Density, Less Than 0.95G/CC (Will Float On Water) For RC Hobby Use
- 10,000-PSI Compressive Strength
- Excellent Toughness
- Excellent Water/Salt Water Resistant for Marine/Aero Applications
- Low Shrinkage and will not swell during cure
- 2-Hour Working Time And Will Set Up Overnight

DESCRIPTION

MAX EMC is an epoxy based molding and modeling resin system that offers a formable compound that cures to a hard and durable polymer. MAX EMC holds its profile when sculpted or formed to shape. When cured, it demonstrates lightweight in density with a high compressive strength, dimensionally stable, and a non-porous sandable and paintable finish.

MAX EMC cures to a tough but sandable compound suitable for molding, modeling, patching holes and gauges on composites panels, wood or metal boat hulls. It is also can be used as an adhesive for lightweight applications such as RC hobby craft, capable of bonding metals, composites, fiberglass and SMC (Sheet Molding Compound) parts.

Application and Usage

Measure out equal parts of Resin and Curing Agent and mix by kneading together by hand until a uniform color is achieved. A fist-size mass will have about 90 to 120 minutes of working time. A larger mass will have a shorter working time due to heat generation (Exotherm). To avoid excessive exotherm, work in sections when molding a large mold and use an internal frame structure, much like a skeletal system to help support the MAX EMC until it has cured. MAX EMC will bond to itself without extensive surface preparation. To color MAX EMC, add oil based colorant only or dry powder pigment, do not use food coloring or water-based colorants. Knead Resin and Curing Agent together until uniform then knead in the colorant until a uniform color mixture is achieved.

PHYSICAL PROPERTIES

Density (Mixed)	0.95 gm/cc
Foam and Color	Part A – White Putty Part B – Hardener: Off-White Putty
Viscosity Mixed	Thixotropic, Non-Sag
Mix Ratio	Equal parts by weight or by volume
Working Time	85 Minutes @ 77°F (25°C), 200 gm mass
Peak Exotherm	120°F 300 gram mass
Cure Time	24 Hrs. Minimum or 2 Hrs. @ room temperature plus 120 min. @ 212°F (100°C)

MECHANICAL PROPERTIES

Hardness	90 ± 5 Shore D
Tee-Peel Strength (Standard)	3.2 Lbs. per inch Width Aluminum to Aluminum
Compressive Strength	15,800 psi @ 77°F (25°C)
Tensile Shear Strength	3,700 psi @ 77°F (25°C) 2,200 psi @ -112°F (-80°C) 950 psi @ 212°F (100°C)
Elongation	1.3% Maximum Yield
Tensile Strength	5,800 psi
Service Temperature	-67°F to 250°F

ELECTRICAL PROPERTIES

Volume Resistivity	2.7 x 10 ¹² Ohms-cm (Ω-cm)
Dielectric Strength	510 Volts/Mil @ 60 Hz.
Dielectric Constant	3.23 @ 60 Hz

ENVIRONMENTAL TEST

Salt Spray	100°F (38°C), 200 Hrs.	NO EFFECT
Impact	500 gram ball dropped at height of 24 inches	NO EFFECT

CHEMICAL RESISTANCE TEST – 10 Day Soak Test @ 77°F (25°C)

	WEIGHT CHANGE, %
Distilled Water	0.53
Sulfuric Acid 30%	1.90
Nitric Acid	3.80
Toluene	3.70
NaOH	10.0
Anti-Freeze	No Effect
Motor Oil Soak	No Effect

PACKAGING AND STORAGE

MAXBOND A/B is available in use size kits and special packaging requests are also available. MAXBOND A/B should be stored in a cool dry place. DO NOT store above 30°C for prolonged period. MAXBOND A/B is warranted for 12 months from the date of shipment.

SAFETY NOTE

This product is for industrial use only. Please review all precautions before using this product. As with all products of the same nature, avoid prolonged inhalation and repeated skin contact. Always wear safety goggles and impervious rubber gloves when handling this material. Large mass curing of this product is not recommended for it may produce noxious fumes.

MAX BOND A/B

Epoxy Resin System

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