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# Product Description Sheet

## Fixmaster<sup>®</sup> Aluminum Putty

Maintenance, Repair & Operations, May 1999

### PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> Fixmaster<sup>®</sup> Aluminum Putty is a two-part epoxy system heavily reinforced with aluminum powder. Ideal for repairing aluminum parts under typical dry service temperatures of -29° to +93°C (-20° to +200°F), or where aluminum finish is desired.

#### Advantages:

- Won't sag or shrink – can be applied to over-head and vertical surfaces.
- Conforms to odd shapes.
- Easy to mix and use – rebuilds worn parts fast.
- Reduces downtime.
- Forms a non-rusting aluminum-like finish.
- Superior adhesion – forms a solid bond.

### TYPICAL APPLICATIONS

- Repairing aluminum castings
- Repairing worn aluminum parts
- Making models and jigs for holding odd shaped parts
- Making aluminum dies

### DIRECTIONS FOR USE

1. Clean and abrade application surface. Sandblast or grind for best adhesion.
2. Mix 4 parts resin to 1 part hardener by volume or transfer entire kit onto a clean and dry mixing surface and mix material vigorously until a uniform color is obtained.
3. Apply fully mixed material to prepared surface. At 25°C (77°F) working time of one pound of material is 20 minutes and cure time is 6 hours.

### TECHNICAL TIPS FOR WORKING WITH EPOXIES

#### Working time and cure time depends on temperature and mass:

- The higher the temperature, the faster the cure.
- The larger the mass of the material mixed, the faster the cure.

#### To speed the cure of epoxies at low temperatures:

- Store epoxy at room temperature.
- Pre-heat repair surface until warm to the touch.

#### To slow the cure of epoxies at high temperatures:

- Mix epoxy in small masses to prevent rapid curing.
- Cool resin/hardener component(s).

### PROPERTIES OF UNCURED MIXED MATERIAL

Mixture	Typical Value
Appearance	Aluminum Grey Paste
Mix Ratio (R:H) by Volume	4:1
by Weight	6.3:1
Coverage	464 cm <sup>2</sup> @ 6mm thick per lb. .5 ft <sup>2</sup> @ ¼" in. thick per 1 lb.

### TYPICAL CURING PERFORMANCE

#### Curing Properties

(@ 25°C unless noted)	Typical Value
Working Life, minutes	20
Cure Time, hours	6

### TYPICAL PROPERTIES OF CURED MATERIAL

(@ 25°C unless noted)

Physical Properties	Typical Value
Compressive Strength, ASTM D695, psi (N/mm <sup>2</sup> )	11,300 (77.9)
Shear Strength ASTM D1002, psi (N/mm <sup>2</sup> ) .005" gap, acid etched aluminum	1,500 (10.4)
Tensile Strength, ASTM D 638, psi (N/mm <sup>2</sup> )	4,000 (27.6)
Hardness ASTM D-2240, Shore D	87

### GENERAL INFORMATION

**This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.**

**For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).**

### Ordering Information

Part Number	Container Size
97463	1 lb. kit

### Storage

Product shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8°C to 28°C (46°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact your local Technical Service Center.

### Data Ranges

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

### Note

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NOT FOR PRODUCT SPECIFICATIONS.

THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.

PLEASE CONTACT LOCTITE CORPORATION QUALITY DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.

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