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Product Description Sheet

Fixmaster® Flex 80 Liquid

Maintenance, Repair & Operations, May 1999

PRODUCT DESCRIPTION

LOCTITE® Fixmaster® Flex 80 Liquid is a two-part urethane liquid that combines the properties of rubber and urethane to form a unique, tough, and pourable system under typical dry service temperatures of -29° to +82.2°C (-20° to +180°F). It is ideal for casting parts that are subjected to corrosion, wear, and impact. Resists oil, grease, and water and remains resilient.

Advantages:

- Resists abrasion, and impact
- Easy to mix and use
- Combines properties of rubber and urethane
- Lifetime flexibility
- Can be poured into molds
- Application versatility
- Build wear parts fast

TYPICAL APPLICATIONS

- Cast wear parts
- Repair rubber or urethane parts
- Make flexible fixtures
- Make vibration and isolation pads
- Coat pumps and impellers

DIRECTIONS FOR USE

To Adhere Flex 80:

1. Abrade application surface and apply Flex Cleaner Product No. 39636.
2. For metal surfaces use Flex Metal Primer Product No. 98471.

To Cast Flex 80:

1. Prepare mold with wax, or other mold release agent.
2. Shake hardener container thoroughly to mix contents.
3. Add hardener contents to resin container. Mix material thoroughly until a uniform color is obtained being sure to mix along the bottom and sides.
4. Pour, form, or brush into mold or prepared surface. Pour material slowly to avoid bubble entrapment. At 25°C (77°F) working time is 20 minutes and material is cured in 8 hours.
5. To shorten cure time use Flex Accelerator Product No. 97273.
6. See warning labels on packages for safe handling procedures.

TECHNICAL TIPS FOR WORKING WITH URETHANES

Working time and cure time depends on temperature and mass:

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

To speed the cure of urethanes at low temperatures:

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

To slow the cure of urethanes at high temperatures:

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

PROPERTIES OF UNCURED MIXED MATERIAL

	Typical Value
Appearance	Thick Black Liquid
Mix Ratio (R:H) by Volume	100:13.3
by Weight	77:23
Coverage	442 cm ³ per 1 lb. 27 in ³ per 1 lb.

TYPICAL CURING PERFORMANCE(@ 25°C unless noted)

Curing Properties	Typical Value
Working Life, minutes	20
Cure Time, hours	8

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties	Typical Value
Tensile Strength, ASTM D638, psi (N/mm ²)	1,800 (12.4)
Hardness ASTM D-2240, Shore A	87
Elongation, ASTM D638, %	350

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
97412	6 lb. kit
97413	1 lb. kit
97414	10 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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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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