

LOCTITE® Fixmaster® Rapid Rubber Repair Kit

PRODUCT DESCRIPTION

LOCTITE® Fixmaster® Rapid Rubber Repair Kit provides the following product characteristics:

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Technology	Urethane
Appearance - Part A	Brown liquid
Appearance - Part B	Opaque white
Components	Two component - requires mixing
Mix Ratio, by volume - Resin : Hardener	1:1
Cure	Room temperature cure
Application	Belt repair
Specific Benefit	Easy to Use
	Fast curing
	 Waterproof
	Highly flexible
	High peel strength
	 Excellent adhesion
	Excellent tear strength
	 Outstanding tensile strength
	Will not fracture under stress

LOCTITE® Fixmaster® Rapid Rubber Repair Kit is designed to repair rubber, urethane, PVC, and other parts quickly and durably. Unique for its exceptional handling, curing and performance properties, LOCTITE® Fixmaster® Rapid Rubber Repair Kit has the added advantage of the newest and most convenient packaging available. This high performance urethane was developed to repair critical operating equipment faster, more reliably and with greater ease than ever before. LOCTITE® Fixmaster® Rapid Rubber Repair Kit is an adhesive, sealant and repair compound all in one convenient, self-mixing system. The system's no-measure, self-mixing features make it extremely convenient for fast, on-site repairs, especially to conveyor belts and other rubber parts exposed to weather and extreme wear. Extremely tough and fast curing, it forms permanent bonds to rubber, urethane, PVC, metal, glass, masonry and plastics. Typical applications include repairing or rebuilding rubber liners in mills, pumps, feeder bowls, hoppers, chutes, fans, and repairing cast urethane liners. This product typically used in applications with an operating range of -29 °C to +82 °C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A:

Weight per volume kg/L 1.14 to 1.16 (9.45 to 9.65) (lbs/gal)

Viscosity, Brookfield - RV, 25 °C, mPa·s (cP):

Spindle 3, speed 20 rpm, 5,000 to 9,000

Part B:

1.04 to 1.07 Weight per volume kg/L

(lbs/gal) (8.65 to 8.9)

Viscosity, Brookfield - RVDV, 25 °C, mPa·s (cP):

Spindle 4, speed 20 rpm, 7,500 to 9,000

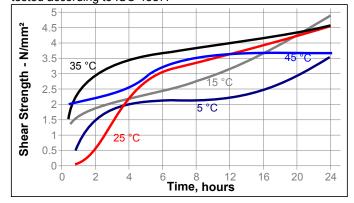
TYPICAL CURING PERFORMANCE

Curing Properties

Cure Time @ 25 °C, hours Gel Time @ 25 °C, seconds 55 to 60

Cure Speed vs. Temperature

The graph below shows the shear strength developed with time on grit blasted steel lap shears at different temperatures and tested according to ISO 4587.





TYPICAL PROPERTIES OF CURED MATERIAL

Cured @ 25 °C except where noted

Physical Properties:

Abrasion Resistance, ASTM D4060: mg 1 Kg load, CS-10 wheels, Weight of Material Lost	5.4
Shore Hardness, ISO 868, Shore A	86
Coefficient of Thermal Conductivity ASTM F 433,	0.18
W/(m⋅K)	
Glass Transition Temperature, ASTM E 1640, °C	≤-50
Coefficient of Thermal Expansion,	165×10 ⁰⁶
ISO 11359-2, K ⁻¹	

Electrical Properties:

Volume Resistivity, IEC 60093, ohm-cm	1.2×10 ¹²
Surface Resistivity, IEC 60093, ohms	196×10 ¹²

TYPICAL PERFORMANCE OF CURED MATERIAL Shear Strength:

Lap Shear Strength, ISO 4587:
Grit Blasted Mild Steel (GBMS)
N/mm² 3.7
(psi) (540)

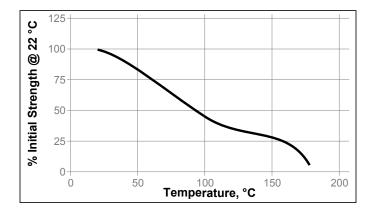
TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 72 hours @ 21 °C

Shear Strength:

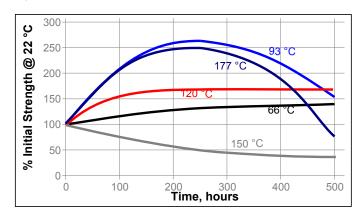
Lap Shear Strength, ISO 4587: Grit Blasted Mild Steel (GBMS)

Hot Strength



Heat Aging

Aged at temperature indicated and tested @ 22 °C



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).

Directions for use:

- Aggressively clean surfaces to be repaired with Loctite® Fixmaster® Flex Cleaner and abrasive pad. If possible, use wire brush with cleaner.
- 2. Insert the cartridge into the application gun and start the plunger into the cylinders using light pressure on the trigger. Next, remove the cartridge cap and expel a small amount of adhesive to be sure both sides are flowing evenly and freely. Attach the static mixing nozzle to the end of the cartridge and begin dispensing the adhesive. Purge and dispose of the first 3 5 cm from the end of the mix nozzle, as it may not be sufficiently mixed..
- 3. Work quickly as material will begin to cure in static mixer.
- 4. Work the urethane onto the substrate to allow maximum surface contact and adhesion.
- 5. It is not necessary to use all the urethane in the cartridge in one application. Leave the static mixer on the cartridge when application is complete. The mixer serves as a seal and should be discarded and replaced with a fresh mixer for the next application.
- 6. NOTE: LOCTITE® Fixmaster® Rapid Rubber Repair Kit cures very quickly at high temperatures, reducing adequate working time and possibly causing premature curing. When applying LOCTITE® Fixmaster® Rapid Rubber Repair Kit at temperatures above 25°C or to a warm surface, refrigerate material thoroughly before making the application. DO NOT REFRIGERATE CLEANER.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties. Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

Conversions

 $(^{\circ}C \times 1.8) + 32 = ^{\circ}F$ $kV/mm \times 25.4 = V/mil$ mm / 25.4 = inches $\mu m / 25.4 = mil$ $N \times 0.225 = lb$ $N/mm \times 5.71 = lb/in$ $N/mm^2 \times 145 = psi$ $MPa \times 145 = psi$ $N \cdot m \times 8.851 = lb \cdot in$ $N \cdot m \times 0.738 = lb \cdot ft$ $N \cdot mm \times 0.742 = oz \cdot in$ $m \cdot m \times 0.742 = oz \cdot in$

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

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