



TECHNICAL DATA SHEET



Henkel Corporation
 Professional and Consumer Adhesives
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Item #	Package	Size
1919324	Carded Syringe	0.85 fl. oz.

DESCRIPTION:

Loctite® Epoxy Metal/Concrete is a two-part system consisting of an epoxy resin and a hardener. The convenient syringe dispenses equal amounts of each component every time. When mixed in equal volumes, resin and hardener react to produce a tough, rigid, high strength bond in 5 to 12 minutes. It is used as an adhesive for repairing, filling and rebuilding all metal and concrete surfaces. Loctite Epoxy Metal/Concrete does not conduct electricity which is ideal for sealing electrical components. It cures to a metallic gray finish and can be easily sanded or machined. It does not shrink and is resistant to water and most common solvents.

RECOMMENDED FOR:

Loctite Epoxy Metal/Concrete is designed for bonding metal and concrete as well as glass, ceramic and wood. Use for repairing machinery, appliances, tools, lawnmowers, automotive components, pipes, imbedding bolts and screws into metals, concrete or stone and sealing electrical components against moisture and vibration.

LIMITATIONS:

- Not recommended for polyethylene, polypropylene, non-stick coatings, nylon products or flexible materials.
- Do not use in applications requiring short term heat exposure greater than 302°F (150°C).
- Do not use in applications where the bonds will be exposed to continuous water immersion or continuously wet areas.
- Do not use in potable water systems.

FEATURES & BENEFITS:

Feature	Benefits
Machinable.....	Will not crack when drilled
Water and solvent resistant.....	Great for interior and exterior projects
Will not conduct electricity.....	Use for sealing electrical components
Sets in 5 to 12 minutes.....	Quick completion of projects
Convenient syringe.....	Dispenses equal amounts of each component

TECHNICAL DATA

Typical Uncured Physical Properties		Typical Application Properties	
Color:	Hardener: Metallic Gray Resin: Off-white	Application Temperature:	39°F (4°C) to 95°F (35°C)
Base:	Epoxy resin / Polymercaptan hardener	Odor:	Mild amine
Specific Gravity:	Hardener: 1.60 Resin: 1.63	Gel Time: (2g:2g)	5 to 12 minutes*
Flashpoint:	Hardener: >200°F (93°C) Resin: >250°F (96°C)	Usable Strength:	12 hours*
VOC Content:	0.04% by weight, CARB (resin & hardener)	Full Cure Time:	24 hours*
Shelf Life:	24 months (from date of manufacture, unopened)	*Time is based on temperature, humidity, and thickness of epoxy applied	



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Lot Code Explanation:	LB7FAC56 (Example)	A – January	G – July
	7 = Last digit in the year of manufacture	B – February	H – August
	7 = 2017	C – March	J – September (there is no I)
	F = Month produced (see chart on right)	D – April	K – October
	F = June	E – May	L – November
June 2017 is the date of manufacture	F – June	M – December	

Typical Cured Performance Properties

Color:	Medium Grey	Cured form:	Non-flammable, hard, solid.
Paintable:	No	Water Resistant:	Yes
Hardness:	80 (+/-2), Shore D	Sandable:	Yes
Service Temperature:	-10°F(-23°C) to 120°F (49°C) -10°F(-23°C) to 302°F (150°C)	Long term exposure Short term exposure	

Test Methods	Cure Time	Data	Substrates
Tensile Shear Strength:	6 hour cure 24 hour cure 7 day cure	1016 ± 142 psi (7.00 ± 0.98 N/mm ²) 2447 ± 7 psi (16.82 ± 0.05 N/mm ²) 3192 ± 94 psi (22.01 ± 0.65 N/mm ²)	Cold Rolled Steel, Sandblasted
	24 hour cure 7 day cure, 24 hr water immersion 7 day cure, 8 day water immersion	2395 ± 82 psi (16.51 ± 0.57 N/mm ²) 2264 ± 59 psi (15.61 ± 0.41 N/mm ²) 2334 ± 131 psi (16.09 ± 0.90 N/mm ²)	Aluminum, Sandblasted
Compressive Shear Strength:	24 hour cure	911 ± 94 psi (6.28 ± 0.65 N/mm ²) 1657 ± 189 psi (11.42 ± 1.30 N/mm ²) 2285 ± 90 psi (15.75 ± 0.62 N/mm ²)	Sanded, Hard PVC (White) Sanded, Acrylite FF Maple
	7 day cure	2201 ± 377 psi (15.18 ± 2.60 N/mm ²)	FRP (dull side)
Solvent Resistance: (Tensile Shear Strength)	7 day cure and 24 hour solvent immersion	3158 ± 162 psi (21.77 ± 1.12 N/mm ²) 3257 ± 115 psi (22.46 ± 0.79 N/mm ²) 3253 ± 142 psi (22.43 ± 0.98 N/mm ²)	Gasoline 10W30 Motor Oil Anti-Freeze
Side Impact Resistance:	1" x 1", 7 day cure	3.3 Joules	Cold Rolled Steel, Sandblasted

DIRECTIONS:

Tools Typically Required

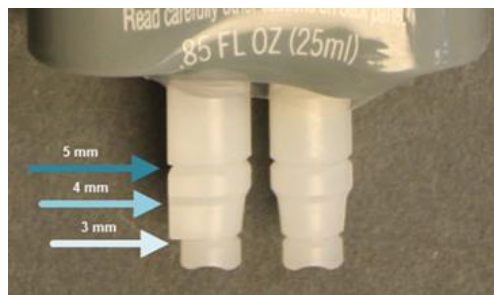
Utility knife, mixing tool/applicator (e.g. small flat plastic or wooden stick), disposable surface (e.g. foil).

Safety Precautions:

Apply and cure in a well-ventilated area. Wear gloves and wash hands after use.

Preparation:

Surfaces must be clean, dry and free from oil, wax, paint, rust, etc. Roughen smooth surfaces for better adhesion by sandblasting or sanding with an emery cloth. Wash glass and ceramic surfaces with soap and water then rinse and let dry. Pre-fit parts to be joined. Remove the plug from between the piston. Cut off the end tips of the syringe at one of the three cut-off points as illustrated below. For easier extrusion, cut at the 4 mm or 5mm opening. For more precise application, cut at 3 mm opening.



Loctite® Epoxy
 METAL / CONCRETE



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DIRECTIONS:

Turn syringe dispensing end up and pull plunger back slightly allowing air bubbles to rise to top. Take care to not exert excessive pressure or plunger may pull out of syringes. Press the plunger to expel air. Depress the double piston to dispense equal parts of the two materials on a disposable surface. Mix resin and hardener thoroughly (about 1 minute). Wipe syringe tips clean, retract piston slightly and close with the plug. Ensure that the plug is always placed in the same orientation on the tips.

Application: Apply a small amount of mixed adhesive to both surfaces, join and press together. Remove any excess glue immediately by wiping with acetone. Support until bond sets in 5 to 12 minutes at room temperature. For best results, clamp or secure as required for 1 hour. Usable strength in 12 hours. Full cure and strength in 24 hours. Moderate heat will speed hardening while cooler temperatures will require a longer set time.

Clean-up: Clean excess glue immediately with acetone before adhesive sets. Cured adhesive may be cut away with caution using a sharp blade. Prolonged immersion in paint stripper will soften the cured adhesive to aid removal. Note: Acetone is highly flammable and not compatible with all surfaces. Follow manufacturer's instructions and test on small area before applying.

LABEL PRECAUTIONS

Not damaged by freezing. If frozen, warm to room temperature until the resin and hardener become liquid enough to mix. Use an approved hazardous waste facility for disposal.

STORAGE AND DISPOSAL

DANGER: Causes eye, skin and respiratory tract burns. May cause allergic skin reaction. May be harmful if swallowed or absorbed through skin.

WARNING: Hardener contains quartz silica, polymercaptan, phenol, and amine curing agents. Resin contains epoxy resin, aluminum, and quartz silica. Do not get in eyes or on skin. Do not breathe vapors. **FIRST AID:** For eye contact, flush with water for 15 minutes, call a physician. For skin contact, wash thoroughly with soap and water, call a physician if symptoms persist. If swallowed, DO NOT induce vomiting, call a physician. **KEEP OUT OF REACH OF CHILDREN.**



WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Refer to the Safety Data Sheet (SDS) for further information

DISCLAIMER

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Henkel recommends purchasers/users should test the products to determine acceptable quality and suitability for the intended use. All adhesive/sealant applications should be tested under simulated or actual end use conditions to ensure the adhesive/sealant meets or exceeds all required project specifications. Since assembly conditions may be critical to adhesive/sealant performance, it is also recommended that testing be performed on specimens assembled under simulated or actual production conditions. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.



Trusted Performance. Proven Results.

For over 50 years, Loctite Brand adhesives and sealants have taken on the toughest jobs. Used in race cars, airplanes, and even in the space-shuttle, Loctite provides solutions for the most demanding industrial, professional and consumer applications. Loctite gives you not the specialization, power and performance to not only get your job done, but to get it done right.

For Technical Assistance call : 1-800-624-7767 – Mon-Fri - 9:00a – 4:00p ET
www.loctiteproducts.com



Loctite Brand is part of the Henkel family of brands. Founded in 1876, Henkel is a global leader in the consumer and industrial businesses. Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care and Adhesive Technologies.

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