

Revision: April 27, 2018 Supersedes: August 30, 2016 Ref. #: 248643 / 352971

TECHNICAL DATA SHEET



Henkel Corporation Professional and Consumer Adhesives Rocky Hill, CT Phone 1-800-624-7767

www.henkel.com www.loctiteproducts.com



Item #	Package	Size
13565736	Carded Bottles	2 x 4 fl. oz. (118ml)

DESCRIPTION:

Loctite® Epoxy Heavy Duty is a two-part adhesive consisting of an epoxy resin and a hardener. When mixed in equal volumes, resin and hardener react to produce a tough, rigid, high strength bond in 5 minutes for most projects. It can be used as an adhesive for a wide range of materials or as a versatile filler for gap bonding, surface repairs and laminating. Loctite Epoxy Heavy Duty does not shrink and is resistant to water and most common solvents. It can be tinted with earth pigments, cement or sand for color matching. It can be sanded and drilled.

RECOMMENDED FOR:

Loctite Epoxy Heavy Duty can be used for bonding metal, glass, ceramic, wood, many rigid plastics, china, tile, fiberglass, concrete and stone. Can be combined with fiberglass cloth for a durable patch.

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).
- Not suitable for use in aquariums or potable water systems.
- Not recommended for applications with prolonged water immersion or continuously wet areas.

FEATURES & BENEFITS:

Feature	Benefits
Machinable	Will not crack when drilled
Water and solvent resistant	Highly durable
Can be tinted	Match surrounding areas
5 minute set time	Quick completion of projects

TECHNICAL DATA

Typical Uncured Physical Properties		Typical Application Properties	
Color:	Hardener: Translucent amber Resin: Translucent clear	Application Temperature:	39°F (4°C) to 95°F (35°C)
Base:	Epoxy resin / Polymercaptan hardener	Odor:	Amine
Specific Gravity:	Hardener: 1.04 Resin: 1.17	Gel Time: (2g:2g)	5 to 10 minutes*
Flashpoint:	Hardener: 199°F (93°C) Resin: 480°F (249°C)	Usable Strength:	20 minutes*
VOC Content:	0.1% by weight CARB (resin & hardener)	Full Cure Time:	24 hours*
Shelf Life:	24 months (from date of manufacture, unopened)	*Time is based on temperatu applied	ure, humidity, and thickness of epoxy

Lot Code Explanation:	LB <u>7F</u> AC56 (Example) 7 = Last digit in the year of manufacture 7 = 2017 F = Month produced (see chart on right) F = June June 2017 is the date of manufacture	A – January B – February C – March D – April E – May F – June	G – July H – August J – September (there is no I) K – October L – November M – December
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Typical Cured Performance Properties			
Color:	Clear to amber	Cured form:	Non-flammable, hard, solid.
Paintable:	No. Can be tinted with earth pigments, cement or sand	Water Resistant:	Yes
Hardness:	76 (+/-1), Shore D	Sandable:	Yes
Service Temperature:	-9°F(-23°C) to 120°F (49°C) -9°F(-23°C) to 302°F (150°C)	Long term exposure Short term exposure	
Test Methods	Cure Time	<u>Data</u>	<u>Substrates</u>
Tensile Shear Strength:	30 minutes cure 1 hour cure 4 hour cure 24 hour cure	483 ± 129 psi (3.33 ± 0.89 N/mm²) 1073 ± 150 psi (7.40 ± 1.03 N/mm²) 3320 ± 149 psi (22.9 ± 1.03 N/mm²) 3597 ± 71 psi (24.8 ± 0.49 N/mm²)	Cold Rolled Steel, Sandblasted
	24 hour cure	2608 ± 432psi (18.0 ± 2.98 N/mm²)	Aluminum, Sandblasted
Compressive Shear Strength:	24 hour cure	748 ± 106 psi (5.16 ± 0.73 N/mm²) 637 ± 191 psi (4.39 ± 1.32 N/mm²) 1771 ± 94 psi (12.2 ± 0.65 N/mm²)	Sanded, Hard PVC (White) Sanded, Acrylite FF Maple
Water Resistance: (Tensile Shear Strength)	7 day cure and 7 day water immersion	3329 ± 251 psi (22.59 ± 1.73 N/mm²)	Aluminum, 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. Unscrew nozzles and remove seal. Replace nozzles, remove caps and cut tips. Dispense equal amounts of resin and hardener onto a clean, disposable surface. Prepare as much as can be used in 5 minutes. Recap bottles at once ensuring that the correct cap goes back on the correct bottle. Interchanging caps will make future cap removal impossible. Mix resin and hardener for one minute thoroughly.

Application:

Apply a small amount of mixed adhesive to both surfaces, within one to two minutes of mixing and press together. Placing parts together close to the 5 minute set time will reduce adhesion. Remove any excess glue immediately by wiping with mineral spirits, acetone, or rubbing alcohol (follow all manufacturer's precautions). Support surfaces until bond sets approximately 5 minutes at room temperature. Usable strength achieved in 20 minutes. Full cure in 24 hours.

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.

STORAGE AND DISPOSAL

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.

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LABEL PRECAUTIONS

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

WARNING: Hardener contains polymercaptan and amine curing agents. Resin contains epoxy resin. Do not get in eyes or on skin. Do not breathe vapors. Do not swallow. **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 immediately. If affected by inhalation, move to fresh air. **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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