



## Epoxy Gel

**Description:** Loctite Epoxy Gel is a two-part adhesive consisting of an epoxy resin and a hardener, available in a convenient dual syringe. When mixed in equal volumes, the resin and hardener react to produce a tough, rigid, high strength bond in 6 minutes. The gel formulation is ideal for vertical surfaces and overhead repairs where dripping may occur. 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 Gel 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.

**Available As:**

Item #	Size	Package
1405602	0.85 fl oz (25 ml)	Carded Syringe

**Features & Benefits:**

- 6 Minute Set Time
- Dries Translucent
- Gel Consistency for Vertical Applications
- Machinable
- Water Resistant
- Will Not Shrink or Expand

**Recommended For:**

Loctite Epoxy Gel 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
- Not suitable for applications requiring short-term heat exposure greater than 302°F (150°C)
- Not recommended for application with prolonged water immersion or continuously wet areas
- Not for use on potable water systems



# TECHNICAL DATA SHEET

## Typical Uncured Physical Properties:

Color:	Hardener:	Clear amber	
	Resin:	Milky white	
Base:	Epoxy resin / Polymercaptopan hardener		
Odor:	Mild amine		
Specific Gravity:	Hardener:	1.40	
	Resin:	1.02	
Flash Point:	Hardener:	> 199°F (93°C)	
	Resin:	> 482°F (250°C)	
VOC Content:	0.11% by weight		CARB
Resin & Hardener:	1.13 g/L		SCAQMD rule 1168
Shelf Life:	24 months from date of manufacture (unopened)		
Lot Code Explanation:	For Example:		
Lot Code Explanation:	<b>LB6FAC569</b>		
	6 = Last Digit in the Year of Manufacture	<b>A</b> – January	<b>G</b> – July
	6 = 2016 (i.e. 5 = 2015, 6 = 2016, etc.)	<b>B</b> – February	<b>H</b> – August
	F = Month produced (see chart at right)	<b>C</b> – March	<b>J</b> – September
	F = June	<b>D</b> – April	<b>K</b> – October
		<b>E</b> – May	<b>L</b> – November
	June 2016 is the date of manufacture	<b>F</b> – June	<b>M</b> – December

## Typical Application Properties:

Application Temperature:	Apply between 39°F (4°C) and 95°F (35°C)		
Gel Time (2g : 2g):	6 minutes*		
Usable Strength:	8 hours*		
Full Cure Time:	24 hours*		
	*Time is dependent on temperature, humidity and thickness of epoxy applied		

## Typical Cured Performance Properties:

Color:	Clear amber		
Cured Form:	Non-flammable solid		
Service Temperature:	-10°F (-23°C) to 120°F (49°C)		Long Term (Continuous) Exposure
	-10°F (-23°C) to 302°F (150°C)		Short Term (Intermittent) Exposure
Water Resistant:	Yes		
Sandable:	Yes		
Paintable:	No but can be tinted using earth pigments, cement or sand		
Hardness:	81 ± 2		Shore D
Tensile Shear Strength:			
Cold Rolled Steel, Sandblasted:			
1 hour cure:	1039 ± 205 psi (7.16 ± 1.41 N/mm <sup>2</sup> )		
4 hour cure:	2512 ± 67 psi (17.32 ± 0.46 N/mm <sup>2</sup> )		
24 hour cure:	2901 ± 575 psi (20.00 ± 3.96 N/mm <sup>2</sup> )		
7 day cure:	3161 ± 130 psi (21.79 ± 0.09 N/mm <sup>2</sup> )		
28 day cure:	3315 ± 321 psi (22.85 ± 2.21 N/mm <sup>2</sup> )		
Aluminum, Sandblasted:			
24 hour cure:	1937 ± 89 psi (13.36 ± 0.61 N/mm <sup>2</sup> )		
7 day cure, 24 hr water immersion:	1962 ± 76 psi (13.53 ± 0.52 N/mm <sup>2</sup> )		
7 day cure, 8 day water immersion:	2124 ± 108 psi (14.64 ± 0.74 N/mm <sup>2</sup> )		
Compressive Shear Strength:			24 hour cure
Sanded Hard PVC (White):	991 ± 254 psi (6.83 ± 1.75 N/mm <sup>2</sup> )		
Sanded Acrylite FF:	724 ± 20 psi (4.99 ± 0.14 N/mm <sup>2</sup> )		
Maple:	1889 ± 287 psi (13.02 ± 1.98 N/mm <sup>2</sup> )		

Solvent Resistance:

24 hour gasoline immersion: 2682 ± 349 psi (18.49 ± 2.40 N/mm<sup>2</sup>)

Tensile Shear Strength  
Aluminum, 7 day cure

**Directions:**

**Tools Typically Required:**

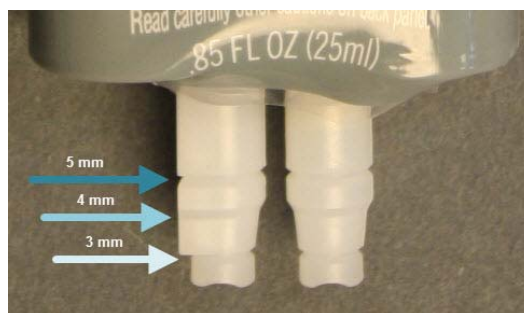
Utility knife, mixing tool/applicator (e.g. small flat plastic or wooden stick), disposable surface (e.g. foil).

**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.



Turn syringe end up and pull plunger back slightly allowing air bubbles to rise to top. 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 about 6 minutes at room temperature. For best results, clamp or secure as required for 1 hour. Usable strength in 8 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.

**Storage & 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.

**Label Precautions:**

**DANGER:** Corrosive. Causes eye and skin burns. May cause allergic skin and respiratory reaction. May be harmful if absorbed through skin.

**DANGER:** Hardener contains polymercaptan, amorphous silica and amine curing agents. 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.**

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. Purchasers should test the products to determine acceptable quality and suitability for their own intended use. 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.



# TECHNICAL DATA SHEET



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