

# **TECHNICAL DATA SHEET**



# Instant Mix™ 5 Minute Epoxy

**Description:** Loctite Instant Mix 5 Minute Epoxy is a two-part adhesive consisting of an epoxy resin and a hardener. When mixed in equal volumes, the resin and hardener react to produce a tough, rigid, high strength bond which starts to set in 5 minutes and reaches handling strength in 1 hour. The static mix nozzle delivers a uniform mixture of resin and hardener every time. 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 Instant Mix 5 Minute Epoxy 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 and can be sanded and drilled.

#### Available As:

Item #	Size	Package
1365868	0.47 fl oz (14 ml)	Carded Syringe
1715208	2 x 0.47 fl oz (14 ml)	Carded Syringes

#### Features & Benefits:

- Self-Mixing
- Precise Application
- Sets in 5 minutes for quick project completion
- Water and Chemical Resistant
- Dries Translucent Yellow
- Machinable
- Does not shrink

### **Recommended For:**

Loctite Instant Mix 5 Minute Epoxy 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: Light yellow

Resin: Clear Colorless to light yellow

Base: Epoxy resin / Polymercaptan hardener

Odor: Mild amine

Specific Gravity:

Hardener: 1.10

Resin: 1.04

Flash Point:

Hardener: 494.6°F (257°C) Resin: 302°F (> 150°C)

**VOC Content:** 

Resin & Hardener: 0.1% by weight

weight

**CARB** 

Shelf Life: 18 months from date of manufacture (unopened)

Lot Code Explanation: YYYY MMXX

Stamped on front of syringe

above the label

Full Cure Time:

**YYYY** = Year of manufacture **MM** = Month of manufacture

XX = Disregard

24 hours\*

For example: 2015 1171

Manufactured in November 2015

Typical Application Properties:

Application Temperature: Apply between 39°F (4°C) and 95°F (35°C)

Gel Time (5g: 5g): 5 to 7 minutes\*

Handling Time: 20 minutes\*

\*Time is dependent on temperature, humidity and thickness of epoxy applied

Typical Cured Performance Properties:

Color: Translucent 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

Tensile Shear Strength:

Cold Rolled Steel, Sandblasted:

 30 minute cure:
 714 psi (4.92 N/mm²)

 2 hour cure:
 2384 psi (16.44 N/mm²)

 4 hour cure:
 2756 psi (19.00 N/mm²)

 24 hour cure:
 3211 psi (22.14 N/mm²)

**Directions:** 

#### **Tools Typically Required:**

Utility knife, disposable surface (e.g. foil, paper).

## Safety Precautions:

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

#### Preparation:

Protect work area. Surfaces must be clean, dry and free from oil, wax and paint. 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. Hold syringe with nozzle end up and pull plunger back slightly allowing air bubbles to rise to top. Snap cap off by pushing to the side (do not twist) and discard. Attach nozzle over syringe opening, push past prongs and turn 90° to lock in place.



# TECHNICAL DATA SHEET

#### **Application:**

Depress plunger to dispense epoxy directly onto one side of the surfaces to be bonded. Wipe syringe tip immediately. Join surfaces within 4 minutes of adhesive application. Immediately remove excess glue using mineral spirits or rubbing alcohol (follow manufacturer's instructions). Bond sets in about 5-7 minutes at 68°F (20°C) to 77°F (25°C). For best results in butt joints, apply adhesive as a reinforcing filet or splint for additional support. Usable strength is obtained within 20 minutes. Warmer temperatures will shorten the set time and cooler temperatures will lengthen it.

#### Clean-up:

Remove and discard nozzle. Retract plunger slightly and wipe syringe tip. Remove cap from side holder and place on end of syringe. Clean excess glue immediately by wiping with clean cloth. Acetone may be used to assist in removal. 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:** Contains epoxy resin, polymercaptan 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 and call a physician. For skin contact, wash thoroughly with soap and water and call a physician if symptoms persist. If swallowed, do not induce vomiting. Call a physician. **KEEP OUT OF THE 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.



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