



# TECHNICAL DATA SHEET



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## DESCRIPTION:

Loctite® Epoxy Marine 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, the resin and hardener react to produce a tough, rigid, high strength bond in 120 minutes. It can be applied and cured underwater. Ideal for repairing pipes. It cures to a white finish and can be easily sanded or machined. It does not shrink and is resistant to water and most common solvents.

## RECOMMENDED FOR:

Bonding metal, concrete, glass, fiberglass, ceramic, wood and certain rigid plastics. Use for surfaces exposed to water immersion. Ideal for PVC, copper, brass and galvanized pipes.

## NOT RECOMMENDED FOR:

- Polyethylene, polypropylene, Nylon™, Teflon™ or flexible materials.
- Applications above 150°F (65°C).
- Aquariums or potable water systems.

## FEATURES & BENEFITS:

Feature	Benefits
High impact resistant.....	Won't crack when drilled
Water and solvent resistant.....	Highly durable
Does not shrink.....	One-time application
Convenient syringe.....	Dispenses equal amounts of each component every time
Apply and cure under water.....	Eliminates the need to drain out water before fixing



Item #	Package	Size
1405604	Carded Syringe	0.85 fl. oz.

## DIRECTIONS:

### Tools Typically Required:

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

### Safety Precautions:

Well-ventilated area, gloves.

### Preparation:

Surfaces must be clean, dry and free from oil, wax and paint. For better adhesion, roughen smooth surfaces prior to cleaning. Pre-fit parts to be joined. Remove the plug from between the piston. Cut off the end tips of the syringe. Depress the double piston to dispense equal parts of the two materials on a discardable surface. Mix resin and hardener thoroughly until uniform in colour. 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 to both surfaces and assemble parts together. Remove any excess glue immediately with acetone. Support parts until bond sets in 120 minutes at room temperature. Allow full cure of 24 hours before subjecting to normal use.

**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.

**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.

**LABEL PRECAUTIONS**

**MAY IRRITATE EYES AND SKIN.** Do not get in eyes or on skin. May cause allergic skin reaction. **KEEP OUT OF REACH OF CHILDREN. FIRST AID TREATMENT:** Contains diethylenetriamine. If swallowed, call Poison Control Centre or doctor immediately. Do not induce vomiting. If in eyes rinse well with water for at least 15 minutes. If on skin, rinse well with water.

Refer to the Material Safety Data Sheet (MSDS) 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**

Typical Uncured Physical Properties		Typical Application Properties	
<u>Color:</u>		<u>Set Time:</u>	120 to 150 minutes
Hardener:	White	<u>Cure Time:</u>	24 hours
Resin:	Tan	<u>Application Temperature:</u>	4°C (39°F) to 35°C (95°F)
<u>Specific Gravity:</u>			
Hardener:	1.52		
Resin:	1.64		
<u>Flash Point:</u>			
Hardener:	93°C (200°F)		
Resin:	204°C (400°F)		
<u>Shelf Life:</u>	24 months from date of manufacture (Unopened)		
<u>Lot Code Explanation:</u>	For Example:		
	<b>L36FAC569</b>		
(Lot code is stamped on the back of the syringe label along the seam)	6 = Last Digit in the Year of Manufacture 6 = 2006 (i.e. 7 = 2007, 8 = 2008, 9 = 2009, etc)		
	F = Month within Year of Manufacture F = 7 <sup>th</sup> Letter of Alphabet F = July (i.e. A = Jan, B = Feb, C = March, etc)		

## Typical Cured Performance Properties

<u>Color:</u>	White
<u>Sandable:</u>	Yes
<u>Hardness, Shore D (7 days):</u>	85 ± 1
<u>Compressive Strength:</u>	
Hard PVC (White), Sanded, 24 hours:	1420 ± 147 psi
Acrylite FF, Sanded, 24 hours:	1172 ± 415 psi
Maple, 24 hours:	1718 ± 370 psi
<u>Tensile Shear Strength:</u>	
Cold Rolled Steel, Sandblasted	
6 hours:	863 ± 170 psi
24 hours:	3000 ± 110 psi
7 days:	3586 ± 268 psi
Aluminum 6061-T6, Sandblasted	
24 hours:	2751 ± 175 psi
<u>Underwater Bonding (Applied &amp; cured underwater):</u>	
Aluminum, Sandblasted, 7 days, Tensile:	551 ± 78 psi
FRP (dull side), 7 days, Compression:	2201 ± 377 psi
<u>Water Resistance – Tensile Shear Strength:</u> (Aluminum to Aluminum, 7 day cure)	
24 hour Water Immersion:	2646 ± 143 psi
7 day Water Immersion:	2600 ± 87 psi
<u>Solvent Resistance – Tensile Shear Strength:</u> (Aluminum, 7 day cure, 24 hour immersion)	
Gasoline, Regular:	3329 ± 251 psi
<u>Side Impact Resistance:</u> (Sandblasted Cold Rolled Steel, 1"x1", 7 days)	6.1 ± 1 Joules
<u>Service Temperature:</u>	-23°C (-10°F) to 150°C (302°F)