

1001 Trout Brook Crossing Rocky Hill, CT 06067-3910 Telephone: (860) 571-5100 FAX: (860) 571-5465

# **Product Description Sheet**

# **Hysol® Product 608**

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#### Description

Loctite® Hysol® 608 is a clear, fast setting epoxy adhesive used in many applications where optical clarity and/or fast cure rates are needed. Hysol 608 bonds a variety of materials including metals and plastics.

#### **Features**

Clear
Easy to Mix
1:1 Mix by Weight and Volume
Quick Set
High Strength
Room Temperature or Heat Cure

Typical Uncured Properties	Part A	Part B	Mixed
Pot Life @ 77°F, 20			5
grams, mins			
Color	Milky White	Amber	Clear
Viscosity, cP	200,000 to	20,000 to	N/A
	450,000	40,000	
Specific Gravity	1.17	1.15	1.16
Mix Ratio			
By weight	1	1	
By volume	1	1	

Typical Properties	Typical Value
CTE, ASTM D 696, in/in/ °C	86 x 10 <sup>-6</sup>
Thermal Conductivity, cal x cm/cm <sup>2</sup> x	5.0 x 10 <sup>-4</sup>
secs x °C	
Hardness, Shore D	80

Electrical Properties	Typical Value
Dielectric Strength, ASTM D149, V/mil	1200
Dielectric Constant, MIL 1-16923. K 1kHz	3.78
Dissipation Factor, ASTM D 150 1kHz	2.1 x 10 <sup>-4</sup>
Volume Resistivity, ASTM D 257	
Surface Resistivity, ASTM D 257	

Shear Strength, psi, ASTM D 1002 Etched Aluminum			
Cure Schedule	Test Temp °F	Typical Value	
1 Hour @ 77°F	77	1500	
24 Hours @ 77 °F	-67	1000	
	77	2000	
	140	600	
	180	200	
2 Hours @ 140 °F	-67	1100	
	77	3000	
	180	250	

#### Handling

<u>Mixing:</u> This product requires mixing two components together just prior to application. Complete mixing is necessary. The temperature of the separate components prior to mixing is not critical, but they should be close to room temperature.

#### **Application**

Mixing - Bulk: Combine Part A (resin) and Part B (hardener) in the correct ratio and mix thoroughly until the color and consistency are uniform. EPOXI-PATCH® Tube Kits have been designed so that squeezing EQUAL LENGTH BEADS of Part A & Part B will give proper ratio. Ratios given above can be used for measuring larger amounts. Mixing the adhesive just prior to use is recommended. Heat buildup during or after mixing is normal. Do not mix quantities greater than one pound as dangerous heat buildup can occur causing uncontrolled decomposition of the mixed adhesive. Mixing smaller quantities will minimize the heat buildup.

Mixing - Cartridges: Place cartridge in proper dispenser. To begin using a new cartridge, remove the cap and dispense a small amount of adhesive, making sure both parts A & B are extruding. Attach nozzle and dispense approximately 1-2" before applying onto the part to be bonded. Partially used cartridges should be stored with the mixing nozzle attached. To reuse, remove and discard the old nozzle, attach the new nozzle, and begin dispensing.

<u>Application</u>: Bonding surfaces should be clean and dry. Once the adhesive is applied, the bonded parts should be held in contact until the part has developed handling strength. It is not necessary to clamp the parts unless movement during cure is likely.

<u>Cure:</u> Complete cure is obtained after 24 hours at room temperature. HYSOL 608 will achieve handling strength in 10-15 minutes at 77°F (note: this can vary with different bond configurations). Hysol 608 can also be fully cured with heat such as; 5-20 minutes at a maximum of 150°F temperature.

<u>Clean Up:</u> It is important to remove excess adhesive from the work area and application equipment before it hardens. Many common solvents and citrus cleaners are suitable for removing uncured adhesive. Consult with your supplier's information pertaining to the safe and proper use of solvents.

## **Packaging**

4 gram Foil Packs 2.8 oz. Epoxi Patch Tube Kits 50 ml and 200 ml EPS Cartridges Quart, One Gallon, and Five Gallon Systems

#### **GENERAL INFORMATION**

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

### Storage

Store product in unopened container in a cool dry location. Ideal conditions are within the range 8 to 21 degrees C (46 to 70 degrees F) and are recommended for long term storage. Exposure to higher temperatures (greater than 28 degrees C) for prolonged periods should be avoided as extended exposure to warm conditions can adversely affect product properties. For further specific shelf life information, contact your local Technical Service Center.

#### Note

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