LOCTITE

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

Product Description Sheet
Hysol® Product D609
formerly Hysol 609

Industrial Products, August 2001

Description
Loctite® Hysol® D609 is an exceptional epoxy formulation recommended for lower temperature or wet industrial bonding applications where fast curing is required. This ultra clear, two part, low viscosity system mixes easily at room temperature. It is suitable for high performance structural bonding applications requiring a combination of very fast room temperature cure, low shrinkage, and excellent mechanical properties. Fully cured Hysol D609 is an excellent electrical insulator and provides superior resistance to vapors and gases, water, galvanic action, petroleum fuels, salt solution and many other organic and inorganic compounds.

Recommended Substrates: metals, phenolic plastics, polyester, glass and glass fabrics, hardboards and forestry products, ceramics, rubber, masonry materials and other construction materials.

Features
Very Fast Room Temperature
No Solvents
Easy to Mix
Very Clear
Self Leveling

Typical Uncured Properties	Part A	Part B	Mixed
Pot Life @ 77°F, 20 grams mins	--	--	5
Color	Clear	Clear	Clear
Viscosity, cP	11,000 to 19,000	11,000 to 19,000	N/A
Mix Ratio			
By weight	1	1	
By volume	1	1	

Typical Properties	Typical Value
Tensile Strength, psi, ASTM D 638	4200
Hardness, Shore D	75

Electrical Properties	Typical Value
Dielectric Strength, ASTM D149, V/mil	415

Shear Strength, psi, ASTM D 1002 Etched Aluminum		
Cure Schedule	**Test Temp °F**	**Typical Value**
24 Hours @ 77°F	77	1800

Handling
Mixing: 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 (1:1) and mix thoroughly until the color and consistency are uniform. 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 1/2 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.

Application: 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.

Cure: Complete cure is obtained after 24 hours at 77°F. HYSOL D609 will achieve handling strength after 10 minutes at 77°F (note: this can vary with different bond configurations).

Clean Up: 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
50 ml and 200 ml EPS Cartridges
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

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Loctite Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loctite Corporation's products. Loctite Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Loctite Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.