



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

## Product Description Sheet

### Hysol® Product 9739

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#### Description

Loctite® Hysol® 9739 is a two part epoxy adhesive which provides excellent temperature resistance and good adhesion to a variety of substrates. It is readily mixed and dispensed in assembly operations.

#### Features

High Temperature Resistance  
Black Color Thixotropic Paste  
Good Chemical Resistance  
Heat or RT Cure

| Typical Uncured Properties     | Part A               | Part B                 | Mixed |
|--------------------------------|----------------------|------------------------|-------|
| Pot Life @ 77°F, 50 grams mins | --                   | --                     | 90    |
| Color                          | Black                | White                  | Black |
| Viscosity, cP                  | 800,000 to 2,000,000 | 1,500,000 to 3,000,000 | Paste |
| Specific Gravity               | 1.47                 | 1.20                   | 1.41  |
| Density, Lbs/Gal               | 12.2                 | 10.0                   | 11.7  |
| Mix Ratio                      |                      |                        |       |
| By weight                      | 100                  | 25                     | --    |
| By volume                      | 3.3                  | 1                      | --    |

#### 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).

#### Application

Mixing: Combine Part A and Part B in the correct ratio and mix thoroughly. **THIS IS IMPORTANT!** Heat buildup during or after mixing is normal. Do not mix quantities greater than one pound (1 lb.), as excessive heat buildup can occur. Mixing smaller quantities will minimize the heat buildup.

Applying: Bonding surfaces should be clean and dry. Hysol 9739 can be applied with a spatula, brush or dispensing machine. Once the adhesive is dispensed, the bonded parts should be held in contact until the part has developed handling strength. Fixturing can be removed at this point. Since full bond strength has not yet been attained, load application should be small at this time.

Curing: Hysol 9739 will cure to ultimate properties in 3 days at room temperature. Oven temperatures up to 300°F can be used. At 300°F complete cure will take place in 15-20 minutes. Lower temperatures can also be used.

Cleanup: It is important to remove excess adhesive from the work area and application equipment before it hardens. Denatured alcohol and many common solvents are suitable for removing uncured adhesive. Consult with your supplier's information pertaining to the safe and proper use of solvents.

| Shear Strength, psi, ASTM D 1002 Etched Aluminum |              |               |
|--------------------------------------------------|--------------|---------------|
| Cure Schedule                                    | Test Temp °F | Typical Value |
| 20 mins @ 300°F                                  | -20          | 2500          |
|                                                  | 77           | 2500          |
|                                                  | 300          | 1000          |

| Shear Strength, psi, ASTM D 1002 Vinyl Ester BMC |              |               |
|--------------------------------------------------|--------------|---------------|
| Cure Schedule                                    | Test Temp °F | Typical Value |
| 20 mins @ 300°F                                  | 77           | 850           |
|                                                  | 300          | 450           |

#### Environmental Exposure

Tensile lap shear strength bonds on etched aluminum were exposed to various conditions then allowed to recover for 24 hours and tested at 75°F per ASTM D1002.

| Conditioning                                                                         | Typical Value |
|--------------------------------------------------------------------------------------|---------------|
| 14 days @ 190°F                                                                      | 2500          |
| 14 days @ 100°F and 100% Relative Humidity                                           | 2500          |
| 14 days Immersion in 300°F Motor Oil                                                 | 2500          |
| 10 Thermal Cycles:<br>16 hours @ 100°F/100% RH<br>4 hours @ -40°F<br>4 hours @ 190°F | 2300          |

#### Storage

Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 2° to 8°C (36° to 46°F). unless otherwise labeled. Optimal storage conditions of this product is achieved with refrigeration: Refrigerated packages shall be allowed to return to room temperature prior to use. To prevent contamination of unused product, do not return any material to its original container. For specific shelf-life information, contact your local Technical Service Center.

**Note**

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