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Product Description Sheet

Hysol® Product 1C-LV

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Description

Loctite® Hysol® 1C-LV is a lower viscosity version of Hysol 1C modified for use in cartridges. Hysol 1C-LV is a general purpose adhesive and sealant that bonds, seals and repairs a wide variety of materials. Fully cured Hysol 1C-LV bonds offer superior thermal shock resistance, mechanical, electrical and impact resistant properties and low permeability to gases and vapors. The cured adhesive has good dimensional stability and resistance to water, weather, oxygen, and ozone, most petroleum products, mild acids and alkalis and many other chemicals.

Recommended Substrates: Metals, wood, most plastics, fiberglass, ceramic.

Features

High shock resistance
Room temperature cure
Low permeability to gases and vapors
Extremely low outgassing

Typical Uncured Properties	Part A	Part B	Mixed
Pot Life @ 77°F, 100 grams mins	--	--	20
Color	White	Tan	Light Tan
Viscosity, cP	62,000 to 102,000	20,000 to 52,500	N/A
Specific Gravity			
Mix Ratio			
By volume	2	1	--

Typical Properties	Typical Value
Tensile Strength, psi, ASTM D 638	2800
Elongation, %, ASTM D 638	3.5
CTE, ASTM D 696, in/in/ °C	35×10^{-6}
Hardness, Shore D	75

Electrical Properties	Typical Value
Dielectric Strength, ASTM D149, V/mil	450

Shear Strength, psi, ASTM D 1002 Etched Aluminum		
Cure Schedule	Test Temp °F	Typical Value
1 Hour @ 180 °F	77	2100

Application

Mixing - Cartridges: Place cartridge in proper dispenser. To begin using new cartridge, remove cap and dispense a small amount of adhesive, making sure both Part A and B are extruding. Attach nozzle and dispense approximately 1-2" before dispensing on to 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 new nozzle, and begin dispensing.

Application: Bonding surfaces should be clean and dry. For optimum surface preparation, consult. 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 3 days at room temperature. After 24 hours, approximately 90% of full cure properties are attained. When in a bonded joint, Hysol 1C-LV will achieve handling strength in 4-6 hours at 77°F (note: this can vary with different bond configurations). Hysol 1C-LV can also be cured with heat such as one hour at 180°F.

Clean Up: It is important to remove excess adhesive from the work area 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 and 200 ml. EPS Cartridge

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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