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Product Description Sheet

Hysol® Product 9412

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Description

Loctite® Hysol® 9412 is a low viscosity, two part epoxy system which provides flexible bonds. The low viscosity of the mixed adhesive allows it to be injected into preassembled parts. The flexibility of the cured adhesive makes it useful for bonding dissimilar substrates. Hysol 9412 can be used as a laminating resin and for potting small assemblies.

Features

Easy to Mix
Self Leveling, Flowable
Excellent Low Temperature Properties
Room Temperature Cure
High Peel Strength
Good Wetting

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 and mix thoroughly until the color and consistency are uniform. 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.

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 room temperature (77°F). Hysol 9412 will achieve handling strength after 8 hours at 75°F (NOTE: this can vary with different bond configurations). Hysol 9412 can also be fully cured in 60 minutes at 180°F. Other times and temperatures (250°F is a suggested maximum) can be used depending on the application.

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.

Availability

Quart, Gallon and Five Gallon Systems

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.

Typical Uncured Properties	Part A	Part B	Mixed
Pot Life @ 77°F, 250 grams mins	--	--	65
Color	Off White	Pink	Pink
Viscosity, cP	10,000 to 20,000	30 to 50	600 to 900
Specific Gravity	--	--	--
Mix Ratio			
By weight	100	25	--
By volume	3.5	1	--

Typical Properties	Typical Value
Hardness, Shore D	75

Shear Strength, psi, ASTM D 1002 Etched Aluminum		
Cure Schedule	Test Temp °F	Typical Value
24 Hours @ 77°F	-67	4500
	77	4000
	140	800
	160	700

Peel Strength ASTM D 3167	Etched Aluminum, pli
3 Days @ 77°F	35

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).

NOT FOR PRODUCT SPECIFICATIONS
THE TECHNICAL DATA CONTAINED HEREIN ARE INTENDED AS REFERENCE ONLY.
PLEASE CONTACT LOCTITE CORPORATION QUALITY DEPARTMENT FOR ASSISTANCE AND RECOMMENDATIONS ON SPECIFICATIONS FOR THIS PRODUCT.
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