

Description

Loctite® EA 9434 is an aluminum filled room temperature curing epoxy paste adhesive with excellent strength retention at elevated temperatures. It consists of a thixotropic gray epoxy paste and a green liquid curing agent. Loctite® EA 9434 yields rigid bonds that are exceptionally resistant to salt spray, humidity, and organic liquids. Its gap filling properties and machinability make it suitable for shimming and repair applications.

Features

Excellent Tensile Shear Strength
 High Temperature Resistance
 Outstanding Environmental Resistance
 Aluminum Filled
 Sag Resistant Paste
 Machinable

Typical Uncured Properties	Part A	Part B	Mixed
Pot Life @ 77°F, 250 grams mins	--	--	60
Color	Gray	Green	Gray
Viscosity, cP	400,000 to 700,000	1,000 to 3,000	90,000 to 150,000
Specific Gravity	1.50	0.95	1.35
Mix Ratio			
By weight	100	35	
By volume	Not Recommended		
Peak Exotherm, 250 grams	400°F @ 65 Minutes		

Typical Properties	Typical Value
Tensile Strength, psi, ASTM D 638	6200
Modulus, psi, ASTM D 638	650,000
Elongation, %, ASTM D 638	1.3
T _g Cured 5 Days @ 77°F	159
Hardness, Shore D	85

Shear Strength, psi, ASTM D 1002 Etched Aluminum		
Cure Schedule	Test Temp °F	Typical Value
3 Days @ 77°F	-67	2400
	77	3050
	180	2100
	250	1300
	300	1050
	400	680
	500	400
Degreased Aluminum	77	900
FRP	77	590
Graphite-epoxy Laminate	77	3900
Bonderized Steel	77	1150

Shear Strength after Environmental Exposure psi, ASTM D 1002 Etched Aluminum Cured 5 Days @ 77°F		
	Test Temp °F	Typical Value
30 Day salt Spray	77	2900
30 day 120°F/100% RH	77	2900
30 Day Water @ 77°F	77	3000
7 Day Hydraulic Fluid @ 77°F	77	3000

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. Handling strength of 500 psi is achieved in 6-8 hours at 77°F.

Cure: Loctite® EA 9434 can be cured for 5 days at room temperature. Curing up to 200°F can be used to reduce cure time. For example, 1 hour at 180°F will give complete cure.

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.

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

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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