LOCTITE

Hysol® EA 9891RP

Epoxy Paste Adhesive

RUDOLPH BROS. & CO.
ADHERING TO QUALITY

Authorized Distributor
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Description
Hysol EA 9891RP is a two-component room temperature curing, abrasion resistant repair paste adhesive suitable for repairing SynSpand® 9890 abradable seal.

Features
Two-Component System
Color Change on Mixing
Abrasion Resistant
Room Temperature Curing

Uncured Adhesive Properties

	Part A	Part B	Mixed
Color	Black	Cream	Dark Gray
Density (g/ml)	44 ± 3 pcf	33 ± 3 pcf	39 ± 5 pcf
Shelf Life @ <85°F/29°C	1 year	1 year	

Handling
Mixing – This product requires mixing two components together just prior to application to the parts to be bonded. Long term storage may induce partial separation of the resins and fillers. Therefore, prior to use, bulk Part A and Part B should be inspected for separation. If separation is evident, mix each part thoroughly prior to mixing the Part A and Part B. Complete mixing is necessary.

Mix Ratio	Part A	Part B
By Weight	100	40

Note: Volume measurement is not recommended for structural applications unless special precautions are taken to assure proper ratios.

Pot Life (400g mass) 20 minutes @ 77°F/25°C
Method – ASTM D2471 in water bath.

Application
Mixing – Premix Part A prior to dispensing. 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 1.5 pounds/680 grams as dangerous heat buildup can occur causing uncontrolled decomposition of the mixed adhesive. WARNING! EXOTHERMIC – TOXIC FUMES CAN OCCUR, RESULTING IN PERSONAL INJURY. The adhesive should be used immediately to prevent a potentially dangerous heat buildup and subsequent uncontrolled decomposition of the mixed adhesive.

Applying – The area to be repaired should be clean, dry and properly prepared. Thin film set time for a 0.125 inch thick film adhesive will occur in 3 hours at 77°F/25°C, after which the support tooling or pressure used during cure may be removed.

Curing – This adhesive is sandable after curing 3 hours at 77°F/25°C. Full cure is attained after 24 hours at 77°F/25°C. A general guideline for determining when the material is sandable is to wait until the paste has a Shore D Hardness measurement of 60 or above. A heating blanket may be used to maintain 77°F/25°C temperatures, however, care must be taken to avoid a potential exotherm. The user needs to simulate repair conditions in order to develop the optimum heat and time cure profile for the specific repair.

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

Product form – This product is available in 1.5 pound (680 grams) pint kits and 100 grams six ounce cartridges.

Bond Strength Performance
Dogbone Tension Strength
Dogbone tension strength tested per ASTM D638, type 1 after 24 hours cure at 77°F/25°C and 2 hours post cure at 160°F/71°C.

Test Temperature	Typical Results	
°F/°C	psi	MPa
77/25	1,650	11.4
160/71	525	3.6

Dogbone tension strength after environmental soaks at 77°F/25°C for 7 days:

Skydrol hydraulic fluid	1,650	11.4
Synthetic lubrication oil	1,650	11.4

Typical QC acceptance tests are cured density, dogbone tension at 77°F/25°C and Shore D Hardness.

Bulk Resin Properties
Shore D Hardness Tested per ASTM D2240

Test Temperature, °F/°C	Typical Results
77/25	65

General Instructions for Use

1. Hand sand area to be prepared to rough up the surface and to remove fluid/dirt contamination. Wipe with solvent after sanding to remove dust.
2. Mix entire components of either the pint or 6.0 oz cartridge kit. Do not partially weigh out adhesive as potential separation of the components can adversely affect properties.
3. Thoroughly mix the adhesive until color and consistency is homogeneous, typically 4 to5 minutes.
4. Apply adhesive to sanded area and smooth with trowel. To aid in adhesion and minimize slump, apply a nylon vacuum bag over the adhesive and work in thoroughly with a trowel. Leave the vacuum bag on until material is cured and then remove.
5. Allow to set for 3 hours at 77°F/25°C before sanding. Temperature below 77°F/25°C will require longer set times for full cure. As a general rule, each 18°F/10°C below 77°F/25°C will require twice the cure time.

6. Lightly sand front and rear edges of repair to improve air flow.

Handling Precautions
Do not handle or use until the Material Safety Data Sheet has been read and understood.
For industrial use only.

General:
As with most epoxy based systems use the product with adequate ventilation. Do not get in eyes or on skin. Avoid breathing the vapors. Wash thoroughly with soap and water after handling. Empty containers retain product residue and vapors so obey all precautions when handling empty containers.
PART A
CAUTION! This material may cause eye and skin irritation or allergic dermatitis. It contains epoxy resins.
PART B
WARNING! This material causes eye and skin irritation or allergic dermatitis. It contains amines.

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