

Advanced Materials

RenPaste® 1220/ Ren® 1220

MULTIPURPOSE EPOXY PASTE

DESCRIPTION:

RenPaste[®] /Ren[®] 1220 is a green, two-part epoxy system especially formulated for base splining of models and mock-ups in the aircraft/aerospace industry. However, its use in a variety of other applications has made it one of the most versatile general purpose epoxy pastes available. RenPaste[®] /Ren[®] 1220 will not run or sag; it cures with minimum shrinkage and sets extremely hard, making it easy machined.

MIXING INSTRUCTIONS:

Reaction Ration 100R to 50H by weight

100R to 50H by volume

Mixing: Stir each component thoroughly before use. Weigh each component accurately (± 5%) into clean containers. Thoroughly mix resin and hardener together (minimum 3 minutes) scraping container sidewalls, bottom and mixing stick several times to assure a uniform mix.

APPLICATIONS:

- Base splining and fairing or original master models.
- Repair paste for room temperature and intermediate plastic and metal bonding tools.
- Potting bushings and inserts.
- Surface and repair paste for router fixtures.
- Metal tool assemblies.

TYPICAL MIXED PROPERTIES:

PropertyASTM Test MethodTest Values (1)Gel Time (4 fl oz.)D-247130 – 45 min.Color mixedVisualGreenViscosityD-2393Paste(1) Tested @ 77 °F (25 °C)



TYPICAL CURED PROPERTIES:

Property	ASTM Test Method	Test Values ⁽¹⁾
Specific Gravity	D-792	1.64
Cubic Inch per pound	D-792	16.9
Hardness (Shore D)	D-2240	81
Ultimate Compressive Strength (psi)	D-695	12,000
Ultimate Flexural Strength (psi)	D-790	6,500
Flexural Modulus	D-790	1.15 x 10 ⁶
Ultimate Tensile Strength (psi)	D-638	3,750
Deflection Temperature (°F) @ 264 psi	D-648	135
Coefficient of Thermal Expansion (in/in/°F)	D-3386	2.20 x 10 ⁻⁵
Shrinkage (in/in) Cast Mold#1	D-2566	.002
(1) Cure Schedule – 7 days at 77 °F (25 °C), tested at 77 °	F	

NOTE: Typical Properties – These physical properties are reported as typical test values obtained by our test laboratory. If assistance is needed establishing product specifications, please consult with our Quality Control Department.

CURING INSTRUCTIONS:

Although room temperature epoxies will normally set up to a rigid, demoldable state within 24 hours at room temperature (75 °F \pm 5 °F), these systems reach their full cure after seven days at room temperature. A full cure can be accelerated by applying heat after the part has set rigid. We recommend a post cure of 150 °F for a minimum of six hours. (Add to this adequate time to bring the part to the post cure temperature). After cure, the part should be cooled at a slow rate so as not t shock the part thermally.

Uniform heat distribution is also required during post cure; concentrated heat, such as that directed from a lamp, can cause warp. An elevated temperature cure will slightly increase the shrinkage compared to a room temperature cure.

HANDLING:

RP 1220 Resin and Hardener

Work in a well ventilated area and use clean, dry tools for mixing and applying For two component system, combine the resin and hardener according to mix ration. Mix together thoroughly and use immediately after mixing. Material temperature should not be below 65 °F (18 °C) when mixing.

RP 1220 Resin

This product may crystallize upon storage. If crystallized, vent container and heat to 125 – 145 °F until crystals dissolve. Stir well after product has liquefied.



STORAGE:

RenPaste® 1220 and Ren® 1220should be stored in a dry place, in the sealed original container, at temperatures between +2°C and +40°C (+35.6°F and 104°F). Under these storage conditions, the shelf life is 2 years. The product should not be exposed to direct sunlight.

PRECAUTIONARY STATEMENT:

Huntsman Advanced Materials Americas LLC maintains up—to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement <u>prior to</u> using this material.

First Aid!

Refer to MSDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN FOR PROFESSIONAL



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