

Advanced Materials**RenPaste® 1250 / Ren® 1250****ALUMINUM FILLED TOOLING AND REPAIR PASTE****DESCRIPTION :**

RenPaste® 1250(Resin) / Ren® 1250(Hardener), a gray, two-part epoxy aluminum filled paste, combines the adhesive characteristics of epoxy with the filling and machining characteristics similar to aluminum. Resin and hardener are easily mixed in a 1 to 1 ration, producing a paste with unlimited maintenance uses and many tooling applications. This easy-to-use paste can be formed into any shape without heat or pressure and bonds to a variety of metals, ceramics, glass, concrete, and wood.

MIXING INSTRUCTIONS :

Reaction Ratio 100R to 100H by weight
 100R to 100H by volume

Mixing : Stir each component thoroughly before use. Weight each component accurately ($\pm 5\%$) into clean containers. Thoroughly mix resin and hardener together (minimum 2-3 minutes) scraping container sidewalls, bottom and mixing stick several times to assure a uniform mix.

APPLICATIONS :

- Construction of jigs, nesting and holding fixtures
- Fillets for metal patterns
- Potting
- Drill bushings
- General repair of tools, dies, jigs, fixtures, models, and prototypes
- Patching of concrete
- Repair of leaks in pipe and ductwork
- Filling cracks in metal casings

TYPICAL MIXED PROPERTIES :

Property	ASTM Test Method	Test Values ⁽¹⁾
Gel time	D-2471	28 minutes
Color mixed	Visual	Gray
Viscosity	D-2393	Paste
Mixed Sag	--	Pass ½" Fail 1"

⁽¹⁾ Tested @ 77 °F (25 °C)

TYPICAL CURED PROPERTIES :

Property	ASTM Test Method	Test Values ⁽¹⁾
Specific Gravity	D-792	1.52
Cubic inch per pound	D-792	18.2
Hardness (Shore D)	D-2240	87-88
Ultimate Compressive Strength (psi)	D-695	12,000
Ultimate Flexural Strength (psi)	D-790	7,300
Ultimate Tensile Strength (psi)	D-638	3,800
Deflection Temperature (°F) @ 264 psi	D-648	129
Coefficient of Thermal Expansion (in/in/°F)	D-3386	2.16 x 10 ⁻⁵
Shrinkage (in/in) cast Mold #1	D-2566	0.0017
Impact Strength, notched (ft-lb/in)	D-256	0.26
Lap Shear Strength ⁽²⁾ (psi)	D-1002	
Cured 6hrs @ R.T.		2,100
Cured 30 min. @ 80 °C		2,100

⁽¹⁾ Cure Schedule – 7 days @ 77 °F (25 °C), tested @ 77 °F

⁽²⁾ Alclad 2024-T-3 aluminum degreased and acid etched according to ASTM D-2651, Method A.

NOTE : Typical Properties – These physical properties are reported as typical test values obtained by our test laboratory. If assistance is needed in 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 ± 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 postcure of 150 °F for a minimum of six hours. (Add to this adequate time to bring the part to the postcure temperature.) After cure, the part should be cooled at a slow rate so as not to shock the part thermally.

Uniform heat distribution is also required during postcure; 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 :**RenPaste® 1250 / Ren® 1250**

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 ratio. Mix together thoroughly and use immediately after mixing. Material temperature should not be below 65 °F (18 °C) when mixing.

PACKAGING :

This product is available in the following package sizes:

Small Preweighed Units = 6-qt. Resin (total 15#) with
 6 Preweighed hardener (total 15#)

Please call Customer Service (800) 367-8793 for price and availability

STORAGE :

RenPaste[®] 1250 / Ren[®] 1250 should 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 prior to using this material.

First Aid!

Refer to MSDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

FOR PROFESSIONAL

IMPORTANT LEGAL NOTICE

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The manufacture of materials is the subject of granted patents and patent applications; freedom to operate patented processes is not implied by this publication.

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