



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 ratio, 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. Weigh each component accurately (± 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 (189 g.)	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 6 hrs. @ R.T.		2,100
Cured 30 min. @ 80°C		2,100

⁽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 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 ($75^{\circ}F \pm 5^{\circ}F$), 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 $150^{\circ}F$ 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.

STORAGE/HANDLING INFORMATION:

RenPaste 1250/Ren 1250

Store at 60-100°F in a dry place. After use tightly reseal.

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.

SHELF LIFE: Provided materials are stored under the recommended storage conditions in their original containers, they will remain in useable condition for at least one year from date of shipping.

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

PACKAGING: This product is available in the following package size(s):

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.

SAFETY/HANDLING PRECAUTIONS: Do not use or handle this product until the Material Safety Data Sheet has been read and understood.

RenPaste 1250

WARNING! Causes skin and eye irritation. May cause allergic skin reaction.

Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

Ren 1250

DANGER! CORROSIVE – causes eye burns and skin irritation. Harmful if absorbed through skin. May cause allergic skin and respiratory reactions.

Do not get in eyes, on skin, or on clothing. Avoid prolonged or repeated contact with skin. Avoid breathing vapor or mist. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Nuisance dust may be generated when sanding or sawing cured material.

FIRST AID: In case of contact with:

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes.

Eyes: Immediately flush with water for at least 15 minutes. Call a physician.

Ingestion: If conscious, give plenty of water to drink. Do not induce vomiting. Call a physician. **Inhalation:** Remove to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

Other: Referral to physician is recommended if there is any question about the seriousness of any injury.

PRECAUTIONARY NOTE: Thermosetting systems generate heat when curing. The amount of heat and the period of time in which heat is released vary significantly between systems. Additionally, ambient or compound temperature, amount of material mixed, and construction and shape of the mold or container can also be factors in the temperature profile of a mixed system.

In some cases, the thermosetting reaction can be vigorous, generating heat sufficient to cause decomposition of the system with subsequent liberation of large volumes of acrid smoke.

A good rule of thumb is never mix more material than can be applied during the stated pot life or gel time. Also take care when using materials in applications other than stated on the Product Data Sheet, i.e., a laminating resin for casting.

Please feel welcome to call our Product Information Department or your local Ren representative for instructions before you start your job.

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