

Advanced Materials

RP 1257-3

NON-METALLIC FILLED PASTE
NON-METALLIC, INORGANIC FILLED FAIRING COMPOUND

DESCRIPTION :

Ren[®] RP 1257-3 is a highly filled, two-part epoxy paste system containing non-metallic, inorganic fillers. The hardener and resin are of different colors to insure complete mixing. The material is a uniform blue color when completely mixed.

USES :

RP 1257-3 is excellent for fairing conventional aerodynamic surfaces. This system has a history of excellent performance as a fairing compound. It is widely used by major aircraft manufacturers for flyaway and prototype wind-tunnel applications.

RP 1257-3 is excellent for potting bushings and bonding applications, and for building nesting fixtures. The versatility of this material has developed many new applications since its introduction.

ADVANTAGES :

- **EAST TO HANDLE** – RP 1257-3 is of a creamy consistency and is very easy to mix and to apply with a spatula, putty knife or any conventional tool.
- **ACCEPTABLE Ph factor** – This system gives an almost neutral pH value.
- **NO ELECTROLYTIC CORROSION** – The RP 1257-3 system was designed to eliminate electrolytic corrosion when used in contact with metallic substrates.
- **COLOR CEDED** – The different colored hardener and resin insure complete mixing. When all of the streaks have disappeared and a uniform color is obtained, the material is completely mixed and ready to use.
- **EXCELLENT SANDABILITY** – RP 1257-3 can be easily sanded.
- **ADHESION** – The adhesive properties of RP 1257-3 are excellent and typical of the superior bonding which can be accomplished with epoxies.
- **GOOD SAG RESISTANCE** – Due to its paste consistency, RP 1257-3 will hang up to ¼" on a vertical surface.
- **EASY MIXING RATIO** – The resin-hardener mixing ratio for RP 1257-3 is one-to-one, both by weight and volume. This assures easier proportioning and mixing, since the ration is less critical than many epoxy systems.

TYPICAL PROPERTIES :

Property	Resin	Hardener
Color and Form	White paste	Blue paste
Sag Resistance @ 25 °C (77 °F)	Pass 1/4" Fail 3/8"	Pass 1/4" Fail 3/8"
Special Gravity @ 25 °C/25 °C	1.71	1.71
Flash Point Closed Cup	250 °F +	250 °F +

TYPICAL MIXED PROPERTIES :

100 : 100 by weight or volume

Color and Form

Sag Resistance @ 25 °F

Pot Life @ 25 °C (4fl. oz.)

Cured pH

Lap Shear Strength @ 25 ° (1)

Compressive Strength – ultimate @ 25 °C (2)

Flexural Strength – ultimate @ 25 °C (3)

Tensile Strength – ultimate @ 25 °C (4)

Volumetric Weight Ratio

Blue Paste

Pass 1/4¼" – Fail 3/8"

30 minutes

8.9

2,130 psi

13,000 psi

6,000 psi

3,980 psi

15.7 cu-in/lb.

(1) Aluminum adherends etched per ASTM D-2651 and tested per ASTM D-1002 – cured 24 hrs. @ 25 °C

(2) Tested per ASTM D-695

(3) Tested per ASTM D-790

(4) Tested per ASTM D-638

STORAGE / HANDLING INFORMATION :**RP 1257-3 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.

RP 1257-3 Resin and Hardener

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 ration. Mix together thoroughly and use immediately after mixing. Material temperature should not be below 65 °F (18 °C) when mixing. For fast cleaning of hands, Use Ren® RP 70S Hand Cleaner before washing.

SAFETY / HANDLING PRECAUTIONS :

Do not use or handle this product until the Material Safety Data Sheet has been read and understood.

RP 1257-3 Resin

WARNING. COMBUSTIBLE. Causes skin and eye irritation. Keep away from heat and flame. May cause allergic skin and respiratory reactions.

Keep away from heat and flame.
Avoid contact with eyes, skin and clothing.
Avoid breathing vapor or mist.
Avoid prolonged or repeating contact with skin.
Keep container closed.
Wash thoroughly after handling.

RP 1257-3 Resin

DANGER CORROSIVE. Causes eye burns and severe skin irritation. May cause allergic skin and respiratory reactions. May cause skin burns.

Do not get in eyes, on skin, or on clothing.
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, generation 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.

Caution To protect against any potential health risks presented by our products, the use of proper personal protective equipment (PPE) is recommended. Eye and skin protection is normally advised. Respiratory protection may be needed if mechanical ventilation is not available or is insufficient to remove vapors. For detailed PPE recommendations and exposure control options consult the product MSDS or a Huntsman EHS representative.

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