

Advanced Materials**RenLam[®] 1710 / Ren[®] 956 System****ROOM TEMPERATURE LAMINATING SYSTEM****DESCRIPTION:**

RenLam[®] 1710(Resin) / Ren[®] 956(Hardener) is a white, room temperature curing, two-component epoxy laminating system offering excellent cloth wet-out and low shrinkage with good dimensional stability.

APPLICATIONS:

RenLam[®] 1710 / Ren[®] 956 system is well suited for patterns, drill jigs, assembly fixtures, Keller models, body cubes, draw dies, master die models, spotting rack, etc.

MIXING INSTRUCTIONS:

Reaction Ratio 100R to 16H (by weight)
 100R to 23H (by volume)

Mixing: Stir each component thoroughly before use. Weigh each component accurately ($\pm 5\%$) 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.

TYPICAL PHYSICAL PROPERTIES:

Property	ASTM Test Method	Test Values ⁽¹⁾
Ge time (4 fl. oz.)	D-2471	35 mins.
Color Resin Hardener Mixed	Visual	White Amber White
Mixed Viscosity	D-2393	2,000 cP

⁽¹⁾ Tested @ 77°F (25°C)

TYPICAL CURED PROPERTIES:

Property	ASTM Test Method	Test Values ⁽¹⁾
Ultimate Compressive Strength (psi)	D-695	26,900
Ultimate Flexural Strength (psi)	D-790	32,900
Flexural Modulus (psi)	D-790	1.5×10^6
Ultimate Tensile Strength (psi)	D-638	25,000
Coefficient of Thermal Expansion by TMA (in/in/°F)		0.81×10^{-5}

⁽¹⁾ Cure Schedule – Contact laminate, 10 oz. glass cloth, 90° rotation, postcured 24 hrs. at 77°F (25°C).

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. For best results, parts should be supported during postcure.

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 :**RenLam® 1710 / Ren® 956 system**

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.

RenLam® 1710 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.

Stir well before use. This material will separate.

PACKAGING:

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

Pail Unit = Pail Resin (38#) with appropriate Hardener (7.8#)

Drum Units = Drum Resin (500#) with Hardener 5-gal. (40#)

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

STORAGE :

RenLam® 1710 / Ren® 956 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 AND INDUSTRIAL USE ONLY

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