



Product Data

PROVISIONAL DATA SHEET

RenLam™ 177-114 / Ren® 1700-1

DESCRIPTION: RenLam177-114(Resin)/Ren 1700-1(Hardener) is an unfilled, low viscosity two component, epoxy laminating system.

MIX RATIO: 100 Resin to 26 Hardener by weight
100 Resin to 28 Hardener by volume

TYPICAL MIXED PROPERTIES:

Property	ASTM Test Method	Test Values ⁽¹⁾
Pot Life (4 fl.oz.)	D-2471	20 minutes
Viscosity, mixed	D-2393	1,120 cP

⁽¹⁾Tested @ 77°F (25°C)

TYPICAL CURED PROPERTIES:

Property	ASTM Test Method	Test Values ⁽¹⁾
Specific gravity (cast)	D-792	1.13
Volumetric weight (cast)	D-792	18.5 cu/in/lb.
Deflection Temperature @ 264 psi (cast)	D-648	128°F
Hardness (Shore D)	D-2240	90
*Ultimate Compressive Strength (psi)	D-695	28,000
*Ultimate Flexural Strength (psi)	D-790	37,000
*Flexural Modulus	D-790	1.55 x 10 ⁶
*Ultimate Tensile Strength (psi)	D-638	26,000
Coefficient of Thermal Expansion(in/in/°F)	D-696	1.0 x 10 ⁻⁵

Properties determined in a 10 oz. glass cloth laminate cured for 7 days 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.

STORAGE/HANDLING INFORMATION:

RenLam 177-114

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/HANDLING INFORMATION continued

RenLam 177-114 and Ren 1700-1

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

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. 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.

RenLam 177-114

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 1700-1

DANGER! CORROSIVE – causes eye burns and skin irritation.

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.

FIRE PRECAUTIONS: In case of fire, use carbon dioxide, foam, dry chemical or water spray. Decomposition and combustion products may be toxic. Use self-contained breathing apparatus.

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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