

Advanced Materials**RenGel® 1118 / Ren® 1118****A VERSATILE INTERMEDIATE P&P SURFACE COAT****DESCRIPTION :**

RenGel® 1118 (Resin) / Ren® 1118 (Hardener) is a versatile, all-purpose surface coat designed primarily for use with plaster. Its light blue color provides a contrast to the plaster and the system offers excellent adhesion. This system may be used at temperatures up to 200 °F (93 °C) when post cured. (See curing instructions).

APPLICATIONS :

RenGel® 1118 / Ren® 1118 is recommended as a surface coat for plastic-faced plasters, as a general purpose, room temperature surface coat and as intermediate heat-resistant system. It can be used for duplicator models, prototypes, dies, fixtures, molds, etc., and can be backed up by epoxy laminates and castings or plaster.

MIXING INSTRUCTIONS :

Reaction Ratio 100R to 9H by weight
 100R to 13H 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 MIXED PROPERTIES :

Property	ASTM Test Method	Test Values ⁽¹⁾
Gel time (4 fl. oz.)	D-2471	30 mins.
Color Mixed Resin	Visual	White
Hardener		Blue
Mixed		Light Blue
Mixed Sag	D-2730	Pass 1/16"
		Fail 1/8"

⁽¹⁾ Tested @ 77 °F (25 °C)

TYPICAL CURED PROPERTIES :

Property	ASTM Test Method	Test Values⁽¹⁾
Specific Gravity	D-792	1.46
Cubic inch per lb.	D-792	19.0
Izod Impact (ft-lb/in)	D-256	0.5
Hardness (Shore D)	D-2240	90
Ultimate Compressive Strength (psi)	D-695	13,400
Ultimate Flexural Strength (psi)	D-790	6,500
Ultimate Tensile Strength (psi)	D-638	3,500
Deflection Temperature (264 psi)	D-648	235 °F (113 °C) ⁽²⁾
Coefficient of Thermal Expansion (in/in/°F)	D-3386	2.56 x 10 ⁻⁵
Shrinkage (in/in) (cast) (Mold# 0)	D-2566	0.002

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

⁽²⁾ 2 hrs. @ 200 °F (93 °C), 3 hrs. @ 325 °F (163 °C)

NOTE : Typical Properties – These physical properties are reported as typical test values obtained by our test laboratory. If assistance is needed 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 post cure of 150 °F for two hours followed by 200 °F for four hours. (Add to this adequate time to bring the part to the post cure 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 post cure ; 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 :**RenGel[®] 1118 and Ren[®] 1118**

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.

RenGel[®] 1118

Stir well before use. This material will separate.

PACKAGING :

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

Small Premeighed Units : 6 quarts resin / 6 preweighed hardener (total weight 17.3#)

Pail Units : Pail resin at 40# and gallon hardener at 3.6#

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

STORAGE :

RenGel® 1118 (Resin) / Ren® 1118 (Hardener) 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

IMPORTANT LEGAL NOTICE

Huntsman Advanced Materials warrants only that its products meet the specifications agreed with the user. Typical properties, where stated, are to be considered as representative of current production and should not be treated as specifications.

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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Main Offices :

Huntsman Corporation
10003 Woodloch Forest Dr.
The Woodlands
Texas 77380
(281) 719-6000

**Huntsman Advanced Technology
Center**

8600 Gosling Rd.
The Woodlands
Texas 77381
(281) 719-7400
Website :

www.huntsman.com/advanced_materials