

**Advanced Materials****RenCast® 3261 / Ren® 3261 Casting System**

## SURFACE COAT AND SURFACE CASTING MATERIAL

**DESCRIPTION :**

RenCast® 3261 (Resin) / Ren® 3261 (Hardener) surface coat system is a general purpose, iron-filled epoxy offering high impact strength. Easily mixed, the material cures at room temperature and provides extremely accurate detail reproduction from patterns or models.

**APPLICATIONS :**

- Foundry patterns
- Hammer forms
- Core Boxes
- Stripper pads
- Holding fixtures
- Drop hammer dies
- Rigid castings up to ½ inch thick in non-conducting molds
- Rigid casting up to ¾ inch against metals

**MIXING INTRUSCTIONS :**

Reaction Ratio            100R to 6H by wt.  
                                      100R to 16H by vol.

**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 :**

<b>Property</b>	<b>ASTM Test Method</b>	<b>Test Values<sup>(1)</sup></b>
Gel Time, (4 fl. Oz.)	D-2471	25 min.
Color Mixed	Visual	Black
Viscosity	D-2393	35,000 – 50,000 cP

<sup>(1)</sup> Tested @ 77 °F (25 °C)

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**TYPICAL CURED PROPERTIES :**

<b>Property</b>	<b>ASTM Test Method</b>	<b>Test Values<sup>(1)</sup></b>
Specific Gravity	D-792	2.94
Cubic inch per lb.	D-792	9.4
Hardness (Shore D)	D-2240	88
Ultimate Compressive Strength (psi)	D-695	16,500
Ultimate Flexural Strength (psi)	D-790	8,500
Ultimate Tensile Strength (psi)	D-638	6,000
Deflection Temperature (264 psi) (°F)	D-648	138
Coefficient of Thermal Expansion (in/in/°F)	D-3386	3.0 x 10 <sup>-5</sup>
Water Absorption (%)	D-570	0.309
2 hrs. boil		0.038
24 hrs. @ RT		0.107
7 days @ RT		0.003
Shrinkage (in/in) Cast Mold #1	D-2566	

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

**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.

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**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 a minimum of six 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.

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**HANDLING :****RenCast® 3261 / Ren® 3261**

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.

**Ren® 3261**

This product may crystallize upon storage. If crystallized, vent container and heat to 125 – 145 °F (51.7–62.8 °C) until crystals dissolve. Stir well after product has liquefied.

Stir well before use. This material will separate.

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**PACKAGING :**

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

Small Preweighed Units : 6 quarts Resin with 6 preweighed Hardener

Pail Units : Pail Resin (60#) with appropriate Hardener (3#)

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

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**STORAGE:**

RenCast<sup>®</sup> 3261 (Resin) / Ren<sup>®</sup> 3261 (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.

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**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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