

Advanced Materials**RenCast[®] 6492 / Ren[®] 6492 System****RIGID, FLAME RETARDANT POLYURETHANE SYSTEM****DESCRIPTION :**

RenCast[®] 6492 (Resin) / Ren[®] 6492 (Hardener), a non-mercury, flame retardant, rigid polyurethane system. This product is a new development in the family of RenCast[®] fast polyurethanes, having been specifically formulated with the desirable combination of long work time (gel time) and short demolding time. RenCast[®] is designed to closely simulate the properties of flame retardant ABS.

APPLICATIONS :

- Handcasting
- Vacuum Casting
- Pressure Pot Casting

ADVANTAGES :

- Flame retardant ABS like material meeting UL-VO standards
- Contains no mercury catalyst
- Convenient mix ratio
- Can be used in a broad range of processes
- Unique combination of high rigidity (flex modulus > 400,000 psi), impact resistance and heat resistance
- Neutral color makes this system easily pigmentable

MIXING INSTRUCTIONS :

Reaction Ratio 100R to 100H by weight
 97R to 100H by volume

TYPICAL MIXED PROPERTIES :

Color	Off-White, Pigmentable
Resin Viscosity, cPs	30 – 50
Hardener Viscosity, cPs	1800
Gel Time (150 g), min	6 – 8 min
Demold Time, depending on part geometry and thickness	4 hrs @ 77 °F (25 °C) 1 – 2 hrs @ 140 °F

TYPICAL CURED PROPERTIES :

Cure Schedule	7 days @ 77 °F (25 °C)
Density, g/cc	1.3
Hardness, Shore D	85
Ultimate Flexural Strength, psi	16,600
Flexural Modulus, psi	410,000
Ultimate Tensile Strength, psi	9,000
Tensile Modulus, psi	425,000
% Tensile Elongation at Break	8
Ultimate Compressive Strength, psi	23,000
Compressive Modulus, psi	352,000
Tg per DMA, °F (°C)	200 (93)
Deflection Temperature @ 66 psi, °F (°C)	150 (66)
Izod Impact, notched, ft-lb/in	0.5
CTE, -22 ° to 86 °F, in/in/°F	36 x 10 ⁻⁶
CTE, -30 ° to 30 °C, in/in/°C	64 x 10 ⁻⁶

HANDLING :

This product is moisture-sensitive and packaged under a blanket of dry nitrogen. Maintain factory seal. After use reblanket with dry nitrogen and tightly reseal. 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. If heating of products in plastic packaging is necessary, heat in a ventilated oven to 145 °F maximum. Before heating loosen the container lid slightly to relieve any pressure buildup and place container to be heated into a metal bucket of sufficient volume to contain the product, should the container tip over or leak. Work in a well ventilated area and use clean, dry tools for mixing and applying.

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.

STORAGE :

RenCast® 6492 (Resin) / Ren® 6492 (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 1 year. 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.

WHILE ALL THE INFORMATION AND RECOMMENDATIONS IN THIS PUBLICATION ARE, TO THE BEST OF HUNTSMAN ADVANCED MATERIAL'S KNOWLEDGE, INFORMATION AND BELIEF, ACCURATE AT THE DATE OF PUBLICATION, nothing herein is to be construed as a warranty, whether express or implied, including but without limitation, as to merchantability or fitness for a particular purpose. In all cases, it is the responsibility of the user to determine the applicability of such information and recommendations and the suitability of any product for its own particular purpose.

The behavior of the products referred to in this publication in manufacturing processes and their suitability in any given end-use environment are dependent upon various conditions such as chemical compatibility, temperature, and other variables, which are not known to Huntsman Advanced Materials. It is the responsibility of the user to evaluate the manufacturing circumstances and the final product under actual end-use requirements and to adequately advise and warn purchasers and users thereof.

Products may be toxic and require special precautions in handling. The user should obtain Safety Data Sheets from Huntsman Advanced Materials containing detailed information on toxicity, together with proper shipping, handling and storage procedures, and should comply with all applicable safety and environmental standards.

Hazards, toxicity and behavior of the products may differ when used with other materials and are dependent on manufacturing circumstances or other processes. Such hazards, toxicity and behavior should be determined by the user and made known to handlers, processors and end users.

Except where explicitly agreed otherwise, the sale of products referred to in this publication is subject to the general terms and conditions of sale of Huntsman Advanced Materials LLC or of its affiliated companies including without limitation, Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., and Huntsman Advanced Materials (Hong Kong) Ltd.

Huntsman Advanced Materials is an international business unit of Huntsman Corporation. Huntsman Advanced Materials trades through Huntsman affiliated companies in different countries including but not limited to Huntsman Advanced Materials LLC in the USA and Huntsman Advanced Materials (Europe) BVBA in Europe.

Ren and RenCast are registered trademarks of Huntsman Corporation or an affiliate thereof in one or more, but not all, countries.

Copyright © 2007 Huntsman Corporation or an affiliate thereof. All rights reserved.

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