

TYPICAL CURED PROPERTIES:

Property	ASTM Test Method	Test Values ⁽¹⁾	Test Values ⁽²⁾
Density (g/cc)	D-792	1.04	1.04
Hardness (Shore A)	D-2240	35-40	35-40
Ultimate Tensile Strength (psi)	D-638 @ 20"/min.	505 (3,480 kPa)	535 (3,685 kPa)
Ultimate Elongation (%)	D-638 @ 20"/min.	330	400
Tear Strength (ppi)	D-624 @ 20"/min. DIE C	74 (13 kN/m)	80 (14 kN/m)
Compression Set ⁽³⁾ (%)	D-395 B	8	25
Linear shrinkage (in/in)	D-2566 Mold #1	0.003	0.010

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

⁽²⁾Cure Schedule – 24 hours @ 77°F (25°C), + 16 hours @ 176°F (80°C)

⁽³⁾Compression Set, ASTM D-395, Method B.

The percent of permanent deformation resulting from constant deflection/pressure required to compress samples 25%.

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 polyurethanes 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 176°F for a minimum of 16 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.

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 increase the shrinkage compared to a room temperature cure.

STORAGE/HANDLING INFORMATION:

RenCast 6410-1 and Ren 6410-1

Store at 70-90°F. 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.

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.

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If crust has formed, product is no longer usable. Refer to MSDS for proper disposal.

SHELF LIFE: Provided this material is stored under the recommended storage conditions in their original containers, it will remain in useable condition for six months from date of shipping.

PACKAGING: Product is available in "A" packages containing appropriate quantities of resin and hardener. RP 6410-1 Hardener is available in 5-gallon and bulk drum units to match appropriate quantities of existing package sizes of RP 6410-1 Resin. Please call Customer Service (800 367 8793) for price and availability.

SAFETY/HANDLING PRECAUTIONS: Do not use or handle this product until the Material Safety Data Sheet has been read and understood.

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WARNING! Harmful if inhaled. Causes skin and eye irritation. Causes allergic skin and respiratory reactions. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or mist. Avoid prolonged or repeated contact with skin. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

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CAUTION! In accordance with good industrial practice, handle with due care. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Notice! Cancer hazard based on tests with laboratory animals. Overexposure may create cancer risk.

FIRST AID: In case of contact

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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