

SILPAK RU-550 A/B

Clear Flex Urethane Castable Rubber

RU-550 A/B—45 A Shore is a two-component, Bluish/Clear Urethane castable rubber.

Features

- Excellent impact resistance
- Low viscosity for detail definition
- Easy 1-1 mix ratio

Applications

Developed for prototype and special effect applications where high clarity, flexibility and toughness are requested. Use to encapsulate objects and produce clear or tinted colored rubber parts.

***Castings are Non-UV Stable and will slightly discolor over time. Add micro amounts of UD Dyes for creating transparent colored parts.*

Physical Properties – Cured Material

Property	Value
Color	Transparent / Bluish Tint
Durometer, Shore A	45
Viscosity, cps	1200, mixed
Tensile Strength, psi	405
Elongation %	810
Tear strength, pli	65
Gel Time	45 Minutes
Demold Time	16-24 Hours
Mix Ratio	1 A : 1 B (by weight or volume)

**Full properties will develop over 48 hours*

Mixing

Measure out components **by weight or volume at 1A:1B** and mix thoroughly. Since clear materials are inherently difficult to ensure a uniform mix, scrape and transfer 1st mix into another container and re-mix. Avoid whipping in air bubbles. De-air or pressurize in mold to remove air from the mixing process. The area where RU-550 is processed should be controlled to eliminate dust and particles from mixture. Clear castings are sensitive to any foreign materials or air bubbles, which may appear during exothermic reaction if not processed properly. Clean stirrers and mixing containers should be used. RU-550 should be sealed and stored in a dry area.



Casting

RU-550 A/B must be cast in **Platinum Silicone Molds**. All other silicones will be unsatisfactory due to incompatibility. RU-550 is volume exothermic—the more material, the quicker the cure. Small or thin parts will require a post cure for final cure in oven at 100-140°F for 30-60 minutes. RU-550 is a high-impact resistant rubber, which **cannot be polished**. All parts should be cast in one-piece molds with no parting lines for best results.

Storage and Shelf Life

A and B components must be stored in their original, unopened containers at temperatures above 65°F. Shelf life of materials when kept in unopened sealed containers, at the recommended storage conditions, is 6 months. Containers should not be opened until ready for use. Once opened, storage life can be extended with the use of a purging gas—Nitrogen.

Accessories

UD Dye – Red, Yellow, Black Blue (*Transparent colors added at 1-2%)

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