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## Clear RTV Rubber

### R-2550 A/B

#### Product Data Sheet

**R-2550 A/B—53 A Shore** *Clear* Platinum Base (Addition Cure), two-component, room temperature curing (RTV) silicone rubber. designed for its hardness, clarity and tear resistance. The controlled coefficient of thermal expansion makes R-2550 A/B ideal for casting pressure pads and for use as an advanced composite tooling rubber where RTV clarity assists in mold cut out or as a visual aid for injecting resin. Use for mold making, embedding, electrical applications, thermal expanding tools, and clear part fabrication. Use molds to cast polyester, urethane, epoxy, low melt metal (600F), thermoplastics (Polyvinyl), wax, soap, plaster, and any material where a release free casting is required. *Add Silicone Pigments for tinting applications.*

**Available Sizes:** Pint Kit (1 lb) & Qrt Kit (2 lb) Gal Kit (9 lb) & 5 Gal Kit (44 lbs)

#### PHYSICAL PROPERTIES (TYPICAL VALUES) UNVULCANIZED

Color: Clear A / Clear B  
Viscosity @ 77F: 60,000 cps, mixed (100,000 cps)  
Mixing Ratio, A/B: 100/10  
Shelf Life: 6 months

#### TYPICAL PROPERTIES OF CURED RUBBER @ 24 Hrs 77F (25C)

Specific Gravity: 1.06  
Hardness: 53 A Shore  
Tensile Strength: 940 psi  
Elongation %: 372  
Tear Strength: 152 pli  
Thermal Conductivity BTU-FT F.: 1.5<sup>2</sup>  
Coefficient of Thermal Expansion IN./IN.F.: 8.5 x 10<sup>-5</sup>

**Work Time:** 45 minutes      **Cure Time:** 16 hours

#### MIXING & CURING INSTRUCTIONS:

The base (A) and curing agent (B) are mixed just before using. Part B should be shaken prior to use. Carefully weigh Part A and Part B by appropriate Mix Ratio. Automatic mixing equipment or manual mixing may be used to combine base and curing agent. Since material is clear, a double mix—mixing in one container then transferring to another and re-mixing—is recommended to ensure a thorough mix. De-airing (degassing) material is always recommended. Immediately after mixing, place the material in a vacuum chamber to remove trapped air and allow enough room for expansion as vacuum is drawn, as much as four times its original volume. Remove from vacuum chamber and pour very gently into cavity so as not to re-incorporate air into the material. Pressure casting (50-60 psi) until cured has proven well in eliminating air bubbles. Material may require 48 hours for full hardness, or Post cure at 250F for 1 hour.

#### INHIBITION:

Certain materials will cause inhibition or neutralizing of the curing agent. These materials are sulphur and organo-metallic salt containing compounds found in organic rubbers and many condensation cure RTV, chloride solvents – amines. Avoid using latex gloves, water based clays and Tin/Condensation cured RTVs. Inhibition may easily be determined by brushing a small quantity of this material over the surface and allowing it to cure. If material remains tacky and gummy after the curing time, then the part's surface is acting as an inhibitor. *\*\*See Addition Cure Technical Data Sheet for inhibiting materials*

#### CURING CHART

TEMPERATURE	POT LIFE	CURE TIME
80 F	45 MIN	16 HOURS
150 F	5 MIN	60 MIN
300 F	----	5 MIN

#### STORAGE/SHELF LIFE:

A and B components must be stored in their original, unopened containers at temperatures between 60-90F. Shelf life of materials when kept in unopened, sealed containers, at the recommended storage conditions, is 6 months

THE INFORMATION AND DATA CONTAINED HEREIN ARE BASED ON INFORMATION WE BELIEVE RELIABLE. EACH USER OF THE MATERIAL SHOULD THOROUGHLY TEST ANY APPLICATION AND INDEPENDENTLY CONCLUDE SATISFACTORY PERFORMANCE BEFORE COMMERCIALIZING. SUGGESTIONS OF USES SHOULD NOT BE TAKEN AS INDUCEMENTS TO INFRINGE ON ANY PARTICULAR PATENT.