

SILPAK R-2310

Soft & Clear Platinum Base Addition Cure RTV

R-2310 A/B—15 A Shore Clear Platinum Base (Addition Cure), two-component, room temperature curing (RTV) silicone rubber designed for its clarity and low durometer while providing excellent physical properties—15 A Shore. 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.

Features

- Room temperature curing (RTV)
- Tintable

- Clear
- Low Durometer

Applications

Use for mold making, embedding, electrical applications, thermal expanding tools, and clear part fabrication. Use mold for any material where a release free casting is required:

- Polyester
- Urethane
- Epoxy
- Soap

- Thermoplastics (polyvinyl)
- Wax
- Plaster

Physical and Handling Properties

| Property | Value | |
|--------------------------------------|------------------------------|--|
| Color | Clear Base / Clear Activator | |
| Mix Ratio, by weight | 10 Base : 1 Activator | |
| Mix ratio by volume | 10 Base : 1 Activator | |
| Initial Viscosity, Base, cP | | |
| Initial Viscosity, Activator, cP | | |
| Initial Mixed Viscosity, at 77°F, cP | 20,000 | |
| Hardness, Shore A | 15 | |
| Gel Time, min | | |
| Demold Time, hours | | |
| Specific Gravity | 1.12 | |
| Tensile Strength, psi | 360 | |
| Elongation, % | 360 | |
| Tear Strength | 60 pli | |
| Shrinkage, in/in | | |

Values listed above are typical and not intended for use in specifications.

Proper Use and Safety

Read all instructions and safety data sheets prior to use. Consult safety data sheets for all recommended safety precautions.

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Mixing

The base and activator are mixed just before using. **Part B should be shaken prior to use.** Carefully weigh Part A and Part 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.

Curing

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. After the mold (or part) has been removed from the master, it should be left for 24 hours in order to develop its maximum mechanical strength.

Inhibition

Certain materials will cause inhibition or neutralizing of the activator. These materials are sulfur and organometallic salt containing compounds found in organic rubbers and many condensation cure RTVs, 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 |
|-------------|----------|-----------|
| 100 F | 30 MIN | 2 HOURS |
| 150 F | 10 MIN | 30 MIN |
| 300 F | | 5 MIN |

Storage & Shelf Life

Base and Activator 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.

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