SILPAK R-1328

High Strength, General Purpose, Tin RTV Silicone System

R-1328 is a 25 Shore A, tin Base (condensation cure), two-component, room temperature cure (RTV) rubber designed primarily as general purpose, high-strength rubber for making molds and flexible rubber parts. Use molds to cast polyester, urethane, epoxy, low melt metal (350°F), thermoplastics (polyvinyl), wax, soap, plaster, and any material where a release free casting is required.

Features

- Excellent physical properties
- High tear resistance
- Long working life finished molds
- Low viscosity for easy pouring
- Additional Activators available for faster cure and brush on applications.

Applications

Use molds to cast polyester, urethane, epoxy, low melt metal (350°F), thermoplastics (polyvinyl), wax, soap, plaster, and any material where a release free casting is required.

- Production molds
- Production parts

Physical and Handling Properties

Property	Value
Color	White Base / Green Activator
Mix Ratio, by weight	100 Base:10 Activator
Initial Viscosity, Part A, cP	30,000
Initial Viscosity, Part B, cP	50
Initial Mixed Viscosity, at 77°F, cP	20,000
Pot Life, min	90
Demold Time, hr	16
Specific Gravity	1.18
Tensile Strength, psi	360
Elongation, %	500
Tear Resistance, pli	135

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.

Mixing & Curing

Activator should be shaken prior to use. Add the activator to the base. The addition of 10% activator (by weight) has a pot life of 90 minutes and is ready for de-molding after 16 hours. R-1328 Activator has a trace of pigment for a visual check of adequate mixing. 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. After the mold has been removed from the master, it should be left for 24 hours to develop its maximum mechanical strength.

Brush On Molds

For brush-on molds, use **Silpak R-1300th Red Activator** or **Silpak PE-ESS-5F Mini Fibers** in place of the pour Activator. The first coat (Detail/Print Coat) should be applied using the **Silpak R-1324 Blue Activator**, this Activator sets up quicker in thin sections. Mix a small batch and paint on the first layer, ensuring that the entire model is covered. Material will drip and pool around the base of model so a dam made of clay or cardboard should be made to contain leaks. Once material has gelled, 60-75 minutes later, the brush on coat can be applied. Continue to build mold wall thickness by applying one coat after another, about an hour apart. This may take several coats, but the goal is to achieve a mold wall thickness of 3/8 to 1/2 inch. It is recommended when building a brush-on mold to complete it within 24 hours to avoid any adhesion problems between layers. Keep mold covered to avoid dust contamination that could affect the adhesion between coats. Hot summer weather could shorten work time. Once rubber mold has been completed and is fully cured, the process of building a support mold made of plaster (**Silpak Castshell**), fiberglass (**Silpak SLR-22**) or urethane plastic (**Silpak Trowel On 60**) to hold the thin rubber mold bladder is undertaken. **Note:** Also available is **Silpak Thix 5170 Additive** to create brush-on, low sag, rubber bladders.

Storage and Shelf Life

Base and Activator must be stored in their original, tightly closed containers to protect from moisture and foreign materials. Storage area should be maintained at temperatures between 64-86°F. Shelf life of materials when kept in unopened, sealed containers, at the recommended storage conditions, is six months. Containers should not be opened until ready or use. Once opened, storage life can be extended with the use of purging gas, such as nitrogen.