

LIFERITE™

MAY 2004

TECHNICAL DATA SHEET

LIFERITE is a skin-safe two-component, platinum-cured, room temperature cure silicone rubber. It is designed as an 18 Shore A, thixotropic rubber providing excellent physical properties for the use in life and body casting due to its forensic detail and long mold life. LIFERITE is our most popular mold making RTV rubber for use against skin.

TYPICAL APPLICATIONS

- Life casting and body casting
- Prosthetics
- Special Effects

TYPICAL PROPERTIES – AS SUPPLIED

Part A Base-Component

- Color White
- Consistency Thixotropic
- Viscosity, cP. (mPas)

Part B Catalyst

Color Purple
Viscosity, cP. (mPas)

TECHNICAL SPECIFICATIONS

Mixing Ratio: 10 Parts A to 1 Part B
Mixed Color: Lavender

Shore A Hardness: 18

GENERAL USE

Safety of Use: LifeRite is safe for external application. Do not use this product for any internal molds including inside of mouth or genitalia. We strongly advise that you apply a small sample to the inside of the wrist of your mode to determine if there will be a negative reaction such as a redness or rash. Discontinue use should you observe such a reaction.

Proper Application and Setting: LifeRite is a platinum-catalyst silicone and is therefore inhibited by latex such as rubber gloves and sulphurs such that you can find in certain clays. The model's skin must be clean and free of all cosmetics and creams (aloe-based creams are the worst offender) or LifeRite may not cure properly. Proper application should be done with a palette knife or spatula, without latex containing gloves. If using a latex skull cap which will inhibit cure, coat with petroleum jelly and cover thoroughly.

Temperature: Store and use LifeRite at room temperature (72°F / 23°C). Colder temperature will reduce setting time and warmer temperature will increase set time and shelf life. To increase set time you may place LifeRite in the refrigerator overnight.

Release: Apply a light coat of Nivea Cream to the skin. Thoroughly cover all body hair as well. Use petroleum jelly on eyebrows and eyelashes and MoldEZ on areas of hair such as head or pubic region. Fairly to coat hair will cause it to be entrapped in the silicone causing discomfort and painful hair pilling on mold removal.

MIXING GUIDELINES FOR LIFERITE TWO COMPONENT PLATINUM CURE MOLDMAKING SYSTEMS

1. Stir the base (Part A) well before use (except when machine dispensing).
2. Shake the catalyst container (Part B) well before use.
3. Weigh the desired amount of base into a clean mixing container. Tip the container and roll the base all the way around the sidewall up to two inches from the top. This will prevent the catalyst from becoming absorbed into the container. It is recommended that the container be filled to not more than 1/3 the container depth to allow sufficient room for expansion during the deaeration procedure.
4. Weigh the proper amount of catalyst into the container. Mix the base and catalyst together by stirring with a stiff, flat-ended metal spatula until a uniform color is obtained. Scrape the container walls and bottom well to insure a thorough mix.

The Next Steps will eliminate all air bubbles, but is not necessary as LifeRite will set with minimum of air bubbles since both Parts A & B have been de-aired at the plant and application is made by brush rather than pouring.

5. If available, place the container into a vacuum chamber and evacuate the entrapped air from the mixture using a vacuum pump capable of achieving 29 inches of mercury vacuum. The mixture will rise, crest and then collapse in the container. Interruption (bumping) of the vacuum may be necessary to prevent overflowing the container. Keep the mixture under full vacuum for 2-3 minutes after the material has receded in the container.
6. Bleed air slowly into the vacuum chamber. When the chamber is at atmospheric equilibrium, remove the cover plate and take out the container.
7. Apply the material using a soft bristle brush, palette knife or spatula. The final mold thickness should be about ¼-1/2-inch (1 cm). LifRite will stick to itself so that thinner areas can be built up with additional LifeRite.
8. Allow the rubber to cure for 5-6 minutes or so before applying the support shell.
9. Allow the mold to cure an additional 60-minutes before casting after removal.

PROCESSING INFORMATION CATALYZED PROCESSING PROPERTIES ARE AFFECTED BY TEMPERATURE AND HUMIDITY VARIATION

1. For best results, mix and cure the material at 72°F (23°C) and 50% relative humidity.
2. Higher temperature and humidity will decrease the work life and pot life of the material. The faster cure will also affect the flow properties. Refrigeration of the base prior to use in hot environments has shown to improve the handling properties of this material.
3. Lower temperatures and humidity will increase the work life and pot life of the material. The slower cure will increase the flow time. Cure temperatures below 68°F (20°C) are not recommended and have been found to cause a reduction in final cure hardness and properties.
4. It is important that the catalyst containers are tightly closed after use. Catalyst exposed to air for extended periods of time will hydrolyze (cure). An indication of hydrolysis is a film or crust formation on the surface of the catalyst. The use of hydrolyzed catalyst is not recommended and may cause incomplete cure.

SAFETY PRECAUTIONS USE MATERIAL IN ACCORDANCE WITH MATERIAL SAFETY DATA SHEET

This rubber system uses a platinum catalyst. Though the material is deemed as skin-safe, testing prior to use is recommended. If any irritation, flushing with water for at least fifteen minutes should relieve discomfort. If irritation persists, obtain medical attention. KEEP PRODUCT AWAY FROM CHILDREN.

