

OOMOO® Series

1A:1B Mix By Volume Silicone Rubber



www.smooth-on.com

PRODUCT OVERVIEW

No Vacuuming – No Scale – Easy To Use . . . OOMOO® 25 & 30 are easy to use silicone rubber compounds that feature convenient one-to-one by volume mix ratios (**no scale necessary**). Both have low viscosities for easy mixing and pouring . . . **vacuum degassing is not necessary**. Both products cure at room temperature with negligible shrinkage. OOMOO® 30 has a 30-minute pot life, with a six-hour cure time. OOMOO® 25 is a faster version, with a 15-minute pot life and 75 minute cure time.

For The Novice Mold Maker - OOMOO® silicones do not have great tear strength. They are good for making simple one- or two-piece block molds. If you require a high-tear strength silicone, Mold Max® silicones are recommended. More information on Mold Max® silicones is available at www.smooth-on.com

OOMOO® 25 & 30 are suitable for a variety of art-related and industrial applications including making one and two-piece block molds for sculpture and prototype reproduction, casting plaster, resins and wax. OOMOO® silicones are also suitable for electrical potting and encapsulation applications.

TECHNICAL OVERVIEW

	A:B Mix Ratio by Volume	A:B Mix Ratio by Weight	Mixed Viscosity (ASTM D-2393)	Specific Gravity (g/cc) (ASTM D-1475)	Specific Volume (cu. in./lb.) (ASTM D-1475)	Pot Life (ASTM D-2471)	Cure Time	Color	Shore A Hardness (ASTM D-2240)	Tensile Strength (ASTM D-412)	Elongation at Break % (ASTM D-412)	Die C Tear Strength (ASTM D-624)
OOMOO® 25	1A:1B	100A:130B	4250 cps	1.34	20.6	15 min.	75 min.	Light Blue	25A	240 psi	250%	40 pli
OOMOO® 30	1A:1B	100A:130B	4250 cps	1.34	20.6	30 min.	6 hours	Lavender	30A	240 psi	250%	40 pli

Volume Resistance (ohm) (ASTM D-150-98): $> 1.0E+14$

Volume Resistivity (ohm cm) (ASTM D-150-98): $> 7.363E+15$

Dielectric Constant k' @ 100 Hz (ASTM D-150-98): 3.33

Dissipation Factor @ 100 Hz (ASTM D-150-98): 0.01

Dielectric Strength (V/mil) (ASTM D-147-97a): 357

Coefficient of Linear Expansion (um/m·°C) (ASTM E-831-06): 288

Thermal Conductivity (W/M·K) (ASTM E-1461): 0.37

Useful Temperature Range: -65°F to 400°F (-53°C to 205°C)

Shrinkage (in./in.) (ASTM D-2566): 0.0025

*All values measured after 7 days at 73°F/23°C

PROCESSING RECOMMENDATIONS

PREPARATION... Safety – Use in a properly ventilated area (“room size” ventilation). Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk. Wear vinyl gloves only. Latex gloves will inhibit the cure of the rubber.

Store and use material at room temperature (73°F/23°C). Storing material at warmer temperatures will also reduce the usable shelf life of unused material. These products have a limited shelf life and should be used as soon as possible. **Stir Parts A and B thoroughly before using**

Cure Inhibition - Silicone rubber may be inhibited by certain contaminants in or on the pattern to be molded, resulting in tackiness at the pattern interface or a total lack of cure throughout the mold. If compatibility between the rubber and the surface is a concern, a small-scale test is recommended. Apply a small amount of rubber onto a non-critical area of the pattern. Inhibition has occurred if the rubber is gummy or uncured after the recommended cure time has passed. Materials found to cause cure inhibition include sulfur-based modeling clays and latex rubber. **To prevent inhibition apply a sealing agent . . . apply a “barrier coat” of clear acrylic lacquer sprayed onto the clay surface.**

Applying A Release Agent - Although not usually necessary, a release agent will make demolding easier when pouring into or over most surfaces. **Ease Release® 200** is a proven release agent for making molds with silicone rubber and for releasing new silicone from cured silicone. Mann Ease Release® products are available from Smooth-On or your Smooth-On distributor. **Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if performance of this material is in question.**

Safety First!

The Material Safety Data Sheet (MSDS) for this or any Smooth-On product should be read prior to use and is available upon request from Smooth-On. All Smooth-On products are safe to use if directions are read and followed carefully.

Keep Out of Reach of Children

Be careful. Use only with adequate ventilation. Contact with skin and eyes may cause irritation. Flush eyes with water for 15 minutes and seek immediate medical attention. Remove from skin with waterless hand cleaner followed by soap and water.

Important: The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.

MEASURING & MIXING...

Stir Part A and Part B thoroughly before dispensing. After dispensing equal amounts of Parts A and B into mixing container, mix thoroughly for 3 minutes making sure that you scrape the sides and bottom of the mixing container several times. Mixture should have a uniform color with no color streaks. If you observe color streaks, continue mixing until they are eliminated. Mixing containers should have straight sides and a flat bottom. Mixing sticks should be flat and stiff with defined edges for scraping the sides and bottom of your mixing container.

POURING, CURING & PERFORMANCE ...

Pouring – For best results, pour your mixture in a single spot at the lowest point of the containment field. Let the rubber seek its level up and over the model. A uniform flow will help minimize entrapped air. The liquid rubber should level off at least 1/2" (1.3 cm) over the highest point of the model surface.

Curing – Allow to cure as prescribed (75 minutes for OOMOO® 25 and 6 hours for OOMOO® 30) at room temperature (73°F/23°C) before demolding. Post curing the mold an additional 4 hours at 150°F (65°C) will eliminate any residual moisture and alcohol which is a by product of the condensation process and may inhibit some resins. Allow mold to cool to room temperature before using. Do not cure rubber where temperature is less than 65°F/18°C.

Using The Mold – No release agent is necessary when casting wax or gypsum. Applying a release agent (Ease Release® 200) prior to casting polyurethane, polyester and epoxy resins is recommended to prevent sticking and mold degradation.

Mold Performance & Storage – The physical life of the mold depends on how you use it (materials cast, frequency, etc.). Casting abrasive materials such as concrete will quickly erode mold detail, while casting non-abrasive materials (wax) will not affect mold detail. Before storing, the mold should be cleaned with a soap solution and wiped fully dry. Two part (or more) molds should be assembled. Molds should be stored on a level surface in a cool, dry environment.



Call Us Anytime With Questions About Your Application.

Toll-free: (800) 381-1733 Fax: (610) 252-6200

The new www.smooth-on.com is loaded with information about mold making, casting and more.