

# Ecoflex™ GEL 2

Platinum Cure Silicone Rubber Gel



www.smooth-on.com

Certified  
Skin Safe!

## PRODUCT OVERVIEW

Ecoflex™ GEL 2 is an extremely soft, platinum silicone rubber gel specifically designed for creating medical simulation devices, silicone makeup appliances, for cushioning, creating gaskets, encapsulation, outside-the-body shaping and enhancement products, silicone babies, theatrical prosthetics and more. and other applications requiring a very soft silicone material.

Ecoflex™ GEL 2 has a Shore hardness of 000-34, this is below the Shore 00 hardness scale. An infinite number of color effects can be achieved by adding Silc Pig™ silicone pigments. **Certified Skin Safe** - Cured material is skin safe and certified by an independent laboratory. Ecoflex™ GEL 2 is mixed 1A:1B by weight or volume. Rubber cures at room temperature (73°F / 23°C) with negligible shrinkage.

Differences between cured Ecoflex™ Gel 2 and original Ecoflex™ Gel include; Gel 2 is “drier” and slightly less sticky. While the Shore hardness is about the same, the Gel 2 has a higher modulus that makes this gel feel firmer. Like the original, Gel 2 cannot be handled as a “stand alone” product. It should be encapsulated in another silicone like Dragon Skin, Q-Ballz encapsulant or other suitable membrane.

## TECHNICAL OVERVIEW

Mix Ratio: 1A : 1B by weight or volume

Mixed Viscosity, cps: 5000 (ASTM D-2393)

Specific Gravity, g/cc: 0.98 (ASTM D-1475)

Specific Volume, cu. in./lb.: 26.4 (ASTM D-1475)

Pot Life: 20 minutes (73° F / 23°C) (ASTM D-2471)

Cure time: 50 minutes (73° F / 23°C)

Color: Translucent

Shore Hardness: 000-34 (ASTM D-2240)

Elongation @ Break: >1000% (ASTM D-412)

Shrinkage, in./in.: <.001 (ASTM D-2566)

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

## PROCESSING RECOMMENDATIONS

### PREPARATION...

**Preparation** - Materials should be stored in and used at room temperature (73°F / 23°C). These products have a limited shelf life and should be used as soon as possible. Rubber may be inhibited by sulfur based clays resulting in tackiness at the surface 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. Inhibition has occurred if the rubber is gummy or uncured after the recommended cure time has passed.

### USING ECOFLEX™ GEL 2 FOR MAKING SILICONE PROSTHETIC MAKEUP APPLIANCES...

Ecoflex™ GEL 2 can be used as a gel filler for creating silicone prosthetic appliances. Ecoflex™ GEL 2 should be encapsulated. For example, Q-Ballz encapsulant can be airbrushed onto a mold surface (e.g. Mold Star™ silicone released with Ease Release™ 200) to create a membrane. Ecoflex™ GEL 2 can then be poured or injected into the mold to create a soft GEL 2 prosthetic encapsulated with strong, non-tacky Q-Ballz™.

**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.**

## MEASURING & MIXING

Before you begin, pre-mix Part B thoroughly. After dispensing required amounts of Parts A and B into mixing container (1A:1B by volume or weight), **mix thoroughly** making sure that you **scrape the sides and bottom of the mixing container several times**. For best results, ‘double mix’ the material by pouring the mixture into a new container, then continuing to mix until material is thoroughly blended. 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.

## 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** - Avoid contact with eyes. Silicone polymers are generally non-irritating to the eyes however a slight transient irritation is possible. Flush eyes with water for 15 minutes and seek medical attention. Remove from skin with waterless hand cleaner followed by soap and water. Children should not use this product without adult supervision.

**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.

## POURING & CURING

**Pouring** - For best results, pour your mixture in a single spot at the lowest point of the containment field or mold. Let the rubber seek its own level. **A uniform flow will help minimize entrapped air.**

**Curing** - Allow rubber to cure for 50 minutes at room temperature (73°F/23°C) before demolding. Time to demold can be reduced with mild heat. Do not cure rubber where temperature is less than 65°F/18°C.



**Call Us Anytime With Questions About Your Application.**

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

The new [www.smooth-on.com](http://www.smooth-on.com) is loaded with information about mold making, casting and more.