Body Double®

"Apply to Skin" Platinum Silicone Rubber

Certified Skin Safe!

www.smooth-on.com

PRODUCT OVERVIEW

Body Double® is a long lasting platinum-cure silicone rubber that can be applied directly to the skin to make molds of the face, hands and other body parts. The rubber cures quickly and will reproduce perfect detail from any original model – far better detail than any alginate!

One Casting or Many . . . For About The Same Price: unlike alginates, which are good for one only casting, **Body Double®** will last for many castings of almost any material including plaster, Matrix® Neo®, wax, resins (Smooth-Cast urethanes, polyester, etc.), low-temperature melt metal alloys, etc. The amount of **Body Double®** used per mold is less than most alginates, so the cost per mold is about the same. **Body Double®** is odorless and is ACMI rated non-toxic and skin safe. Adding **HYPER-FOLIC® release additive** to **Body Double®** silicone will create a self-releasing silicone which is easily removed from hair-covered body areas.

Body Double® "Standard Set" for larger surface areas. Working time of 5 minutes and a demold time of 30 minutes*.

Body Double® "Fast Set" for fast turnaround. Working time of 90 seconds and a demold time of 5 minutes*.

*Depending on material temperature, ambient temperature and body temperature – see "Preparation" below for details.

TECHNICAL OVERVIEW

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

	A:B Mix Ratio by Volume or 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)	Die C Tear Strength (ASTM D-624)	Elongation At Break (ASTM D-412):	Shrinkage (in./in.) (ASTM D-2566):
Body Double® Fast Set	1A:1B	Brushable	1.17	23.7	90 sec.	5 min.	Aqua Green	25A	450 psi	40 pli	500%	<0.001
Body Double® Standard Set	1A:1B	Brushable	1.17	23.7	5 min.	30 min.	Purple	25A	525 psi	40 pli	500%	<0.001

PROCESSING RECOMMENDATIONS

PREPARATION... **Store and use Body Double® at room temperature (73°F / 23°C).** Warmer temperatures will drastically reduce working time and cure time. Storing material at warmer temperatures will also reduce the usable shelf life of unused material. This product has a limited shelf life and should be used as soon as possible. Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk.

Safety - **We recommend that you do a small scale test on the back of your hand** to ensure that you have no allergic reaction to the release preparations or mold rubber. If you notice any type of skin reaction, do not use this product. Body Double® is safe for skin application only – it should not be ingested. Do not use to make molds of the inside of the mouth. You can make molds of a smile - parted lips with teeth exposed, but closed together.

Life casting is best done with at least three people. You will be working with materials that set up quickly. One person is the designated model and the others will mix and apply mold rubber and support shell.

Cure Inhibition **-** Contaminants on the skin will cause inhibition. Prior to applying Body Double® Release Cream, skin should be clean and free of make-up, cosmetics, skin creams, oils perfumes, etc. Do not apply rubber over skin coated with an aloe-based product, as this will cause cure inhibition. **Do not use latex gloves.** If using a bald cap, make sure it is latex free.

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.

RELEASING BODY DOUBLE®... Body Double® will not stick to skin but it will "mechanically lock" onto skin hair including facial hair, eyebrows, eyelashes etc. **Body Double® Release Cream** or **HYPER-FOLIC® release additive** (see below) will minimize mechanical lock. Also, you can shave the intended molding area prior to applying Body Double®.

Body Double® Release Cream (available from Smooth-On) is a non-toxic skin conditioner that will aid in releasing Body Double® mold rubber from skin surfaces with or without hair. It washes off with soap and water. It is highly concentrated, so a little goes a long way. To use, wash intended body section with soap and water and dry thoroughly. Liberally apply Body Double® Release Cream to all skin surfaces

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.

BE CAREFUL **-** Use only with adequate ventilation. Contact with skin and eyes may cause irritation. Flush eyes with soap and 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.

(bare and hair covered) that will contact mold rubber. **Take special care to aggressively massage and work the cream into and over body hair.** Body hair not thoroughly coated with release cream will become encapsulated and stuck in rubber which will be difficult & painful to remove.

HYPER-FOLIC® Release Additive is a non-toxic, skin conditioning liquid that is mixed with Body Double® silicone mold rubber prior to applying rubber to the skin. HYPER-FOLIC® will not only aid in releasing cured rubber from the skin but will also release cured rubber from hair-covered skin surfaces (closely cropped beards, moustaches, eye-brows, pubic hair, etc.) See the HYPER-FOLIC® Technical Bulletin (available at www.smooth-on.com) for more information.

MEASURING & MIXING...

Body Double® "Fast Set" is best dispensed through its pre-measured **400 ml. cartridge tube system with static mixing tube** (1/2" – 18 elements). Cartridge dispensing guns and static mixing tubes are available from Smooth-On distributors. On cartridge tube set (A+B), remove clear cap from cartridge end and Twist / break off end-cap. Screw on static mixing tube and place cartridge in dispensing gun.

Do not squeeze trigger until you are ready to apply rubber. After squeezing trigger, Parts A & B will quickly be mixed through the static mixing tube and dispensed through the tip in a uniform color. Dispense directly onto skin and immediately spread mixture over all surfaces to be molded using a soft bristle brush.

Note: If you stop dispensing, product may cure in static mixing tube. If this happens, replace static mixing tube.

Storage Of Unused Material – Leave static mixing tube with cured material attached to cartridge. To use again, simply replace static mixing tube.

Body Double® "Standard Set" is available in larger units (quarts, gallons, etc.). Mix ratio is 1A:1B by volume. Dispense equal amounts into a mixing container and aggressively hand mix, making sure that you scrape the sides and bottom of your mixing container to attain a uniform color and eliminate any color streaks. Apply to skin with soft bristle brush.

Optional: For initial layer or "detail coat", rubber can be thinned for easier application with Smooth-On's Silicone Thinner. Apply to skin with soft bristle brush. Subsequent layers can be applied without thinner.

Add material as necessary – Body Double® sticks to itself, so adding more rubber is not a problem. Add new material as soon as possible. Be careful when adding new material to cured material - carefully "marry" sections to minimize seam lines. Final mold thickness should be ¼" – ½" (1 cm). Let material cure fully before applying support shell.

APPLYING A SUPPORT SHELL, DEMOLDING & CASTING...

Gypsona® Plaster Bandages (available from Smooth-On) remain the industry standard for making a fast, strong support shell. After Body Double® rubber has cured, brush a thin layer of petroleum jelly onto rubber mold surface to minimize chances of suction or mechanical locking of rigid support shell. Wet and apply bandages over rubber mold surface, following contours. Bandages dry in 15 minutes and can be removed from rubber surface.

Demold Rubber From Body - Slowly peel rubber away from skin surface. If you encounter encapsulated hair that is stuck (did not get enough release agent), you may have to slowly cut the hair with scissors. Be careful not to cut your skin or the mold rubber.

Removing Body Double® Release Cream – **Make-Up Remover will work well**. Apply to skin and then wash area with soap and water. **Baby oil will also work**, but may leave a residue on the skin.

Casting - Seat rubber mold into support shell before casting. A release agent is not necessary when casting most materials. **If casting another platinum-cure silicone rubber**, use Ease Release® 200. **If casting resins**, let rubber cure at least 60 minutes before casting. Store cured Body Double® rubber mold in support shell for best results.

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.