



PRODUCT CATALOG

What Are You Waiting For?
Make It Now!

URETHANE RUBBERS & PLASTICS • SILICONE RUBBERS • EXPANDING FOAMS • RELEASE AGENTS
CASTABLE & LAMINATING EPOXIES • ADHESIVES • MATRIX SYSTEMS • SPRAYABLE MATERIALS

www.smooth-on.com

About Us . . . Since 1895, Smooth-On has been helping people like you discover material possibility. Smooth-On rubbers, plastics, foams and other materials are used around the world to turn ideas into 3-dimensional reality.

This catalog offers a glimpse of what people have created with these materials and will hopefully inspire you to take the next step.

With hundreds of products to choose from and the best technical support available anywhere, we can help bring your creation to life or get your project up and running quickly.



The Smooth-On factory houses one of the largest silicone mixing vessels in North America (1,500 gallons / 5,678 liters) powered by 3 x 100 horse power motors and high-shear mixing blades.

You Are Never Alone . . . Our world famous technical help is available by e-mail or telephone. When you call you will talk to technicians that have experience using these materials and can guide you through your project.

**What Are You Waiting For?
Make It Now!**



2000 Saint John Street, Easton, PA 18042 USA / Tel: 610.252.5800 / Toll Free: 800.762.0744

www.smooth-on.com



Smooth-On's newly expanded 90,000 ft² (8,361 m²) facility in Easton, PA makes hundreds of materials that ship around the world.

"A Digital Material Resource" . . . Thousands of people visit smooth-on.com everyday to view our videos and "how to" galleries. This step-by-step instruction helps you understand how these materials work.



Smooth-on offers two-day mold making and casting seminars that host people from all over the world. Our training methods combine slides, videos, hands-on demonstrations, and discussions. Students use materials to make their own molds and castings and gain an unparalleled learning experience.

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Mold Max® Series

The Power of Pink!

Mold Max® silicones are used around the world for a variety of industrial and art-related applications including architectural restoration, prototype model development, reproducing sculpture, creating special effects and themed environments.

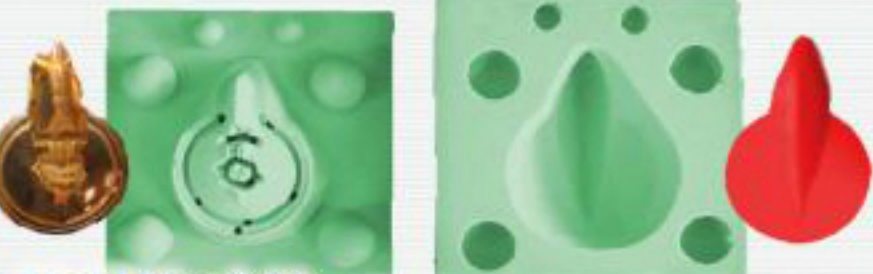
Maximum Versatility – Mold Max® silicones are available in different shore hardnesses and can be poured or brushed on to almost any surface. They capture the finest detail from any original model and reproduce that detail perfectly in any casting. They can be softened or thickened to customize the silicone for your project.

Maximum Durability – Mold Max® silicones feature high tear strength and are ideal for production casting of wax (candle making, wax foundry patterns) gypsum plasters, concrete, urethane, polyester and epoxy resins, low temperature melt metal alloys and more.

Maximum Last-ability – featuring Smooth-On's exclusive "Libra" catalyst, molds made with Mold Max® silicones will last for years in your mold library.

Precise detail reproduction...
Mold Max® silicones capture detail down to a fingerprint.

Mold Max® 10 is soft and very flexible. Great for making molds of models with deep undercuts.



Mold Max® 40 used by Moen prototype shops to make two-piece block molds. This medium hardness silicone yields accurate castings every time.

Mold Max® 30 used for polyester lay-up to make large scale architectural elements.

Mold Max® Series

High Tear Strength, Low Cost, Versatile



Mold Max® STROKE® is convenient and cost effective. It self thickens and holds a vertical surface for making detailed brush-on molds.

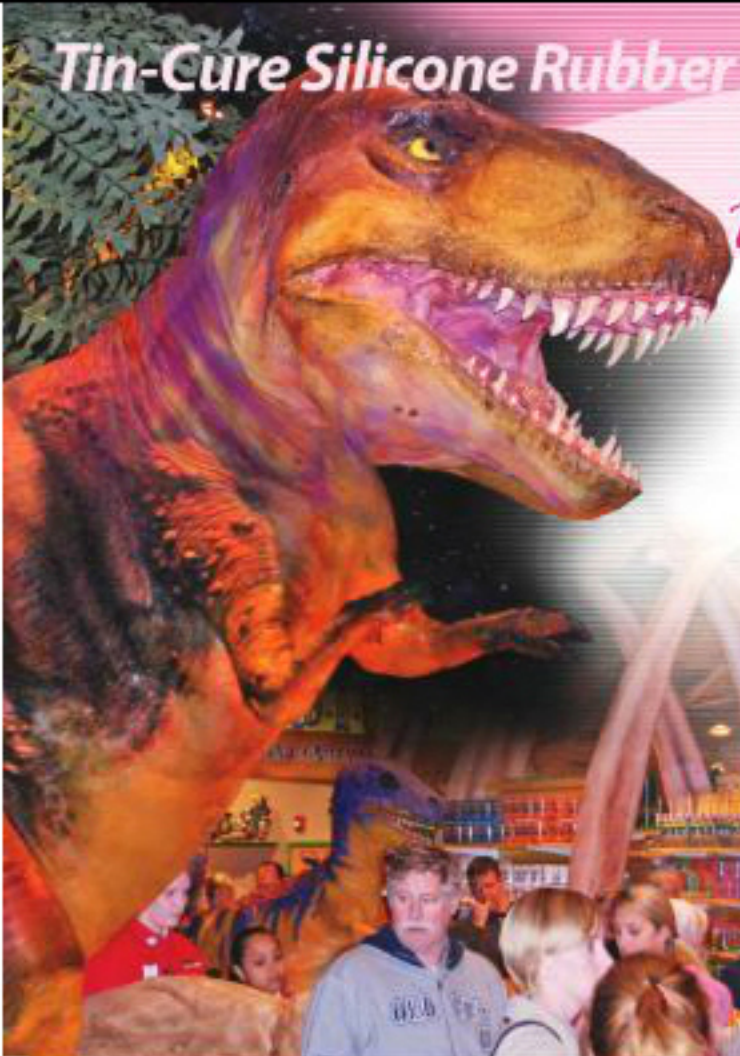
Mold Max® 60 features high heat resistance for casting metal alloys such as tin, pewter, etc. - up to 560°F / 294°C.

Mold Max® 25 has a relatively low initial viscosity for easier mixing, vacuuming and pouring.

Mold Max® - eXtra Low Shrinkage II Long term dimensional stability and resistance to chemically harsh resins makes XLS® a favorite with prototype shops.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Mold Max® 10	100A:108 pbw	15,000 cps	45 min.	24 hrs.	10A	.001	24.1	100 pli	529%	Light Pink
Mold Max® 14 NV	100A:108 pbw	7,500 cps	45 min.	4 hrs.	15A	.002	24.7	87 pli	600%	White
Mold Max® 20	100A:108 pbw	25,000 cps	45 min.	24 hrs.	20A	.001	23.5	110 pli	512%	Light Pink
Mold Max® 25	100A:5B pbw	25,000 cps	60 min.	24 hrs.	25A	.001	23.5	130 pli	375%	Purple
Mold Max® 30	100A:108 pbw	25,000 cps	45 min.	24 hrs.	30A	.002	23.5	125 pli	300%	Pink
Mold Max® 40	100A:108 pbw	45,000 cps	45 min.	24 hrs.	40A	.004	24.3	120 pli	250%	Mint Green
Mold Max® 60	100A:3B pbw	20,000 cps	40 min.	24 hrs.	60A	.0015	19.1	63 pli	132%	Red
Mold Max® XLS® II	100A:108 pbw	30,000 cps	40 min.	24 hrs.	30A	.001	22.7	110 pli	375%	Blue
Mold Max® STROKE®	100A:108 pbw	Brushable	20 min.	16 hrs.	30A	.002	23.5	125 pli	300%	White

Learn more at: www.smooth-on.com



Mold Max® T Series

Translucent for Easy Color Pigmenting

Mold Max® 10T, 15T & 27T silicones are water white translucent tin-cure silicone rubber compounds that have exceptional tear strength, working properties and library life.

Mold Max® 'T' translucent rubbers are ideal for creating animatronic skins and special effects using Silc Pig® silicone pigments.

Mold Max® 10T, 15 & 27 silicones can be thickened with THI-VEX® II additive for brush-on applications.

Mold Max® 27T silicone is used for an animatronic dinosaur skin in a themed restaurant in Florida.



OOMOO® Silicones

...It doesn't get any easier!

Perfect for beginners, hobbyists and craft makers, OOMOO® silicones are easy to use and inexpensive. They don't require special equipment to process and are ideal for making one-piece or two-piece block molds.

OOMOO® molds are good for fast prototyping and model making, creating resin jewelry and home hobby projects.



OOMOO® 30 used to mold custom candles as seen on "The Martha Stewart Show."



Custom kit car lenses cast from an OOMOO® 30 two-piece mold.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Mold Max® 10T	100A:10B pbw	14,000 cps	45 min.	24 hrs.	10A	.0025	25.4	87 pli	586%	Translucent
Mold Max® 15T	100A:10B pbw	20,000 cps	45 min.	24 hrs.	15A	.002	25.6	94 pli	600%	Translucent
Mold Max® 27T	100A:10B pbw	30,000 cps	45 min.	24 hrs.	27A	.002	25.0	110 pli	400%	Translucent
OOMOO® 25	1A:1B pbv	4,250 cps	15 min.	75 min.	25A	.0025	20.6	40 pli	250%	Light Blue
OOMOO® 30	1A:1B pbv	4,250 cps	30 min.	6 hrs.	30A	.0025	20.6	40 pli	250%	Lavender

Learn more at: www.smooth-on.com

Specialty Tin Silicones

Mold Putty, Special Effects, Encapsulation

Mold Making On The Fly...

PoYo® Putty 40 mold making putty is mixed by hand and can be applied anywhere, anytime. Poyo® Putty can be pressed onto almost any surface and can be used to make fast molds for casting resin, wax, etc.



No Mess, No Waste.



Rubber Glass® is a solid water clear rubber that can be easily broken or "crumbled" into pieces that look exactly like broken glass, ice or diamonds. Vibrant colors are possible by adding Silc Pig® or Ignite® color pigments. Rubber Glass® is used to create a variety of special effects and model effects.

Ice That Doesn't Melt!

For an 8 hour photo shoot to make magazine ads, a Rubber Glass® ice effect was used instead of real ice to solve the problem of replacing melting ice during the shoot.



Encapsulate Almost Anything!

Encapso® K is the perfectly clear encapsulation rubber that **looks just like water**. Unlike chemically harsh resins normally used for encapsulation, Encapso® K is safe and non-toxic. Perfect for creating artificial floral displays, water pond effects, etc.



Left: Convincing drink display piece used to advertise at a tropical bar in Mexico - helps sell drinks and the prop lasts for years!



Safe & Non-Toxic

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Poyo® Putty 40	20A:1B pbv	Putty	5 min.	30 min.	40A	.003	21.25	85 pli	250%	Light Pink
Rubber Glass® II	3A:1B pbv	1,200 cps	120 min.	16 hrs.	20A	.005	28.6	N/A	N/A	Clear
Encapso® K	1A:1B pbv	500 cps	60 min.	24 hrs.	20A	.005	28.6	N/A	N/A	Water Clear

Learn more at: www.smooth-on.com

Smooth-Sil® Series

Archival, Minimum Long-Term Shrinkage

Smooth-Sil® silicones are ideal for making production molds of any configuration, large or small. Urethane, urethane foams, epoxies, polyester resins, wax and low-melt metal alloys can be cast into Smooth-Sil® without application of release agent.

Smooth-Sil® 935 is the perfect choice for creating GFRC architectural elements. It is both chemically and abrasion resistant.

With virtually no shrinkage, Smooth-Sil® 935 molds produce identical castings time after time.

Smooth-Sil® 945 offers the convenience of a 1A:1B by volume mix ratio and a fast 6 hour cure time.

Smooth-Sil® 950 is ideal for applications where precise dimensional reproduction is required. Firm yet flexible, Smooth-Sil® 950 also reflects fingerprint detail for the most accurate casting possible.

Smooth-Sil® 940 meets FDA compliance* for food grade applications, making it suitable for baking molds and trays, ice trays, casting butter, candy or chocolate and other applications used to produce food.

FOOD
SAFE!

SORTA-Clear® Series

Translucent Silicone Rubber

SORTA-Clear® 18, 37 and 40 are premium water white translucent silicones that cure at room temperature. They feature exceptional tear and tensile strength. Rubber clarity is especially useful when extracting models via cutting. SORTA-Clear® rubber is ideal for making prototype, jewelry or other molds of any configuration where model visibility is important. SORTA-Clear® 18, 37 and 40 are also food safe* and used to make custom chocolates, candy, cakes and more.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Smooth-Sil® 935	100A:10B pbw	40,000 cps	45 min.	24 hrs.	35A	<0.001	23.5	115 pli	300%	Blue
Smooth-Sil® 940	100A:10B pbw	35,000 cps	30 min.	24 hrs.	40A	<0.001	23.4	100 pli	300%	Pink
Smooth-Sil® 945	1A:1B pbv	30,000 cps	25 min.	6 hrs.	45A	<0.001	22.3	120 pli	320%	Purple
Smooth-Sil® 950	100A:10B pbw	35,000 cps	45 min.	24 hrs.	50A	<0.001	22.3	155 pli	320%	Blue
SORTA-Clear® 18	100A:10B pbw	21,000 cps	60 min.	24 hrs.	18A	<0.001	25.6	80 pli	545%	Translucent
SORTA-Clear® 37	1A:1B pbv	35,000 cps	25 min.	4 hrs.	37A	<0.001	25.6	105 pli	400%	Translucent
SORTA-Clear® 40	100A:10B pbw	35,000 cps	60 min.	16 hrs.	40A	<0.001	27.8	120 pli	400%	Translucent

Learn more at: www.smooth-on.com

* Refer to Technical Bulletin for more details

Mold Star® Series

1A:1B Mix By Volume, Low Viscosity Silicones

Mold Star® 15, 16 and 30 silicones are easy to use and feature relatively low viscosity meaning vacuum degassing is not required. Mold Star® cures to a strong, resin resistant rubber that has good tear resistance and exhibits very low long-term shrinkage. Molds made with Mold Star® silicones will last a long time in your mold library and are good for casting wax, gypsum, resins, and other materials.

No Scale,
No Vacuum
Required

Mold Star® 16 FAST is also available in 400 ml cartridges. See dispensing guns on page 42.

Rebound® Series

Self Thickening Brush-On Silicone Rubber

Rebound® 25 and 40 are easy-to-use platinum-cure silicone rubbers that self-thicken for making brush-on molds of almost any model. Rebound® can be applied with a brush or spatula to vertical surfaces and cures with negligible shrinkage to a soft, flexible rubber. Create strong, durable production molds for casting wax, gypsum, concrete or resins.

Rebound® 25 molds were used to reproduce a giant tree root, creating a unique poolside table at a tropical resort.

SOFT, HIGH
TEAR STRENGTH

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Mold Star® 15 SLOW	1A:1B pbv	12,500 cps	50 min.	4 hrs.	15A	<0.001	23.5	88 pli	440%	Green
Mold Star® 16 FAST	1A:1B pbv	12,500 cps	6 min.	30 min.	16A	<0.001	23.5	88 pli	440%	Blue-Green
Mold Star® 30	1A:1B pbv	12,500 cps	45 min.	6 hrs.	30A	<0.001	24.7	88 pli	339%	Blue
Rebound® 25	1A:1B pbv	Brushable	20 min.	6 hrs.	25A	<0.001	23.5	102 pli	690%	Orange
Rebound® 40	1A:1B pbv	Brushable	20 min.	6 hrs.	40A	<0.001	23.5	106 pli	324%	Green

Learn more at: www.smooth-on.com

* NOTE: Not compatible with sulfur surface

Dragon Skin® Series

Soft, Strong, Flexible, Stretchy...Incredible!

Dragon Skin® is known around the world as the most versatile silicone available anywhere. Available in 10A, 20A, or 30A Shore hardness, **Dragon Skin®** silicones are easy to use and can be colored with Silc Pig® color pigments or the Psycho Paint® system.

Dragon Skin® silicones are used to make lasting lifelike skin and monster effects for animatronics. They are perfect for making stretchy "glove molds" of models with deep undercuts for casting concrete, plaster, etc. Because of its extreme flexibility and wear resistance, **Dragon Skin®** silicones are used extensively for coating fabric, shock absorption and other industrial applications.

Dragon Skin® mermaid suit created by Animal Makers, Inc. is used for a TV commercial.

Incredibly Elastic

Dragon Skin® FX-Pro is specifically designed for creating silicone makeup appliances and skin effects.

Skin Tite® is a skin safe silicone used to create fast wounds, scars and skin effects appliances directly on the skin. It can be sculpted "on the fly", offers maximum control and stays precisely where you put it. **Skin Tite®** can also be used to adhere skin effects, silicone appliances, or silicone masks to the skin even when affixed to hard-to-hold areas such as elbows, fingers, and joints.

Product Name	A-B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Dragon Skin® 10 Slow	1A:1B pbv	23,000 cps	45 min.	7 hrs.	10A	<0.001	25.8	102 pli	1,000%	Translucent
Dragon Skin® 10 Medium	1A:1B pbv	23,000 cps	20 min.	5 hrs.	10A	<0.001	25.8	102 pli	1,000%	Translucent
Dragon Skin® 10 Fast	1A:1B pbv	23,000 cps	8 min.	75 min.	10A	<0.001	25.8	102 pli	1,000%	Translucent
Dragon Skin® 10 Very Fast	1A:1B pbv	23,000 cps	4 min.	30 min.	10A	<0.001	25.8	102 pli	1,000%	Translucent
Dragon Skin® 20	1A:1B pbv	20,000 cps	25 min.	4 hrs.	20A	<0.001	25.6	120 pli	620%	Translucent
Dragon Skin® 30	1A:1B pbv	30,000 cps	45 min.	16 hrs.	30A	<0.001	25.7	108 pli	364%	Translucent
Dragon Skin® FX-Pro	1A:1B pbv	18,000 cps	12 min.	40 min.	2A	<0.001	25.0	61 pli	763%	Translucent

Learn more at: www.smooth-on.com

Ecoflex® Series

Soft, Softer, Softest... Extreme Flexibility and Performance

Ecoflex® Supersoft rubbers are "sister" silicones to our Dragon Skin® series. Available in Shore hardnesses down to a 00-10, Ecoflex® silicones are extraordinarily soft, strong, durable and offer tremendous wear resistance.

Like Dragon Skin®, these rubbers are easy to use and can be vibrantly colored with Silc Pig® or Psycho Paint®. **Ecoflex®** Super-soft silicones are used for creating incredible skin effects, monster masks and special effects appliances. They are also used extensively for medical cushioning applications, including making orthotic and orthopedic appliances, and also for coating fabric.



Ecoflex® 00-50 is used to fabricate silicone socket liners for prosthetic limbs.



Heel pads made of Ecoflex® silicone provide excellent comfort and shock absorption.



Soma Foama® produces lightweight, flexible castings.

Soma Foama®

Soma Foama® 15 and 25 are soft, flexible silicone foams that can be poured into a mold or over other surfaces when lighter weight castings are required.

Soma Foama® is used for a variety of industrial and special effects applications including making foam filled appliances, padding/seat cushioning, and orthopedics.

Product Name	A-B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Ecoflex® Gel	1A:1B pbv	9,300 cps	15 min.	2 hrs.	000-35	<0.001	28.0	N/A	1000%	Translucent
Ecoflex® 00-10	1A:1B pbv	14,000 cps	30 min.	4 hrs.	00-10	<0.001	26.6	22 pli	800%	Translucent
Ecoflex® 00-20	1A:1B pbv	3,000 cps	30 min.	4 hrs.	00-20	<0.001	26.0	30 pli	845%	Translucent
Ecoflex® 00-30	1A:1B pbv	3,000 cps	45 min.	4 hrs.	00-30	<0.001	26.0	38 pli	900%	Translucent
Ecoflex® 00-50	1A:1B pbv	8,000 cps	18 min.	3 hrs.	00-50	<0.001	25.9	50 pli	980%	Translucent
Ecoflex® 5 (cartridges only)	1A:1B pbv	13,000 cps	1 min.	5 min.	5A	<0.001	25.8	75 pli	1,000%	Translucent
Soma Foama® 15	2A:1B pbv	10,000 cps	30 sec.	1 hr.	N/A	N/A	115	N/A	N/A	Off-White
Soma Foama® 25	1A:1B pbv	25,000 cps	90 sec.	2 hr.	N/A	N/A	64	N/A	N/A	Off-White

Learn more at: www.smooth-on.com

Specialty Platinum Silicones

EZ-Brush® Vac Bag Silicone

EZ-Brush® Vac Bag Silicone was developed especially for making high performance, reusable vacuum bags. Compared to vacuum bagging films, **EZ-Brush®** is much faster at delivering production-ready silicone bags, and offers tremendous time and labor savings.

Boat Production in Overdrive

Finished parts are delivered in a fraction of the time using **Vac Bag Silicone** vs. conventional bagging materials. To watch a video of the full process, scan the QR code.



EZ-Brush® Vac Bag can also be used for fast, large scale brush-on molds.

Equinox® Silicone Putty

Equinox® Silicone Putty products can be mixed and applied by hand to a variety of surfaces. Shrinkage is low and cured rubber is exceptionally strong (very high tensile strength). Applications include making fast mold impressions from almost any surface, equine hoof repair, jewelry making and more. **Equinox®** rubbers are also food safe* and used to make custom chocolates, candy, cakes and more.



Equinox® Putty is perfect for making molds on-site when other methods can't be used.

Solaris® Clear Silicone Encapsulant

Solaris® is a low viscosity, clear silicone designed to protect electronic components and other assemblies against shock, vibration, moisture, ozone, dust, chemicals and other environmental hazards. The optical clarity of **Solaris®** makes it suitable for potting solar cells for maximum light transmission or electronic assemblies where component identification is necessary.



Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
EZ-Brush® Vac Bag Silicone	1A:1B pbv	Brushable	30 min.	3.5 hrs.	20A	<0.001	25.7	120 pli	364%	Translucent Green
Equinox® 35 Fast	1A:1B pbv	Putty	1 min.	7 min.	35A	0.0003	21.3	140 pli	430%	Light Purple
Equinox® 38 Medium	1A:1B pbv	Putty	4 min.	10 min.	38A	0.0003	21.3	140 pli	430%	Light Purple
Equinox® 40 Slow	1A:1B pbv	Putty	30 min.	5 hrs.	40A	0.0003	21.3	140 pli	430%	Light Purple
Solaris® Clear Encapsulant	1A:1B pbv	1,200 cps	4 hrs.	24 hrs.	15A	<0.001	28.1	NA	290%	Clear

Body Double® Silicone

Certified Skin Safe



Body Double® Fast Set and **Standard Set** have become Hollywood favorites for capturing and reproducing faces, hands, and other body parts.

New Body Double Silk® releases from hair covered body surfaces without a release agent. **Skin Safe Silk®** is compatible with original **Standard** and **Fast Body Double®** and captures perfect detail.

Unlike alginates, **Body Double®** molds 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.

Body Double® silicone can capture details down to a fingerprint.



Perfect Copy!

NEW!

Body Double Silk® easily releases from beards and other body hair.

Patent Pending

Alja-Safe® Breeze® Liquid Alginate

Crystalline-Silica Free

No powder - no dust! **Alja-Safe® Breeze** is a new liquid alginate which blends easily with water, creating a unique, skin safe moldmaking material. **Alja-Safe® Breeze** is perfect for making single-use pourable molds of hands, feet and other body parts. It captures excellent detail, giving you an accurate reproduction of your original.

Alja Safe® Liquid Breeze® offers significantly less bubble entrapment vs. powder alginates and is virtually bubble free.



Alja-Safe® & Acrobat® Powder Alginates

Crystalline-Silica Free

Alja-Safe® is easy to use, cures quickly, and is much less expensive than silicone.

Acrobat® is a "non-sag" fiber reinforced alginate, perfect for making molds of the face and torso. Both reproduce fine detail and make an excellent "single use" mold. You can cast plaster, Forton® MG Complete® (polymer modified gypsum), platinum-cure silicone, or Smooth-Cast® 300Q urethane resin into the mold to make a reproduction.

Alja-Safe® is used to create a prop arm that looks just like the real thing.

Acrobat® is thicker and holds a vertical surface -

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Body Double® Fast Set	1A:1B pbv	Brushable	90 sec.	5 min.	25A	<0.001	23.7	105 pli	500%	Aqua Green
Body Double® Standard	1A:1B pbv	Brushable	5 min.	30 min.	25A	<0.001	23.7	100 pli	500%	Purple
Body Double® SILK	1A:1B pbv	Brushable	6 min.	20 min.	25A	<0.001	30.4	N/A	N/A	Green
Alja-Safe® Alginate	1:1 pbv water:powder	N/A	5 min.	8 min.	N/A	N/A	26	N/A	N/A	Light Purple
Alja-Safe® Acrobat®	1:1 pbv water:powder	N/A	5 min.	8 min.	N/A	N/A	26	N/A	N/A	Off-White
Alja-Safe® Breeze®	5:1 pbv water:liquid	N/A	5 min.	10 min.	N/A	N/A	26	N/A	N/A	Blue

Learn more at: www.smooth-on.com

Silicone Accessories

FOR USE WITH TIN-CURE SILICONES ONLY

Fast Cat® 30 can accelerate **Mold Max® 30** so that it will cure over frozen models!

FAST CAT® 30 - Used in place of (or in combination with) Mold Max® 30 regular Part B catalyst, Fast Cat® 30 will reduce the demold time from overnight to as little as 30 minutes.

ACCEL-T® is a one-component additive that will reduce the cure time of Smooth-On tin-cure silicone rubber compounds from overnight to a few hours in proportion to the amount added.

FOR USE WITH PLATINUM-CURE SILICONES ONLY

PSYCHO PAINT® is a translucent clear silicone paint base developed to help special effects and prosthetic artisans, doll makers, etc. easily create painted-on color effects for their silicone creations with Silc Pig® color pigments.

SLACKER® Tactile Mutator is a liquid additive used to 'deaden' the silicone, making it more flesh-like.

SLIDE® Liquid Surface Tension Diffuser greatly reduces surface tension when added to platinum cure silicone.



SKIN TITE® is a skin safe silicone (ACMI Certified Safe) used to create fast wounds, scars and skin effects appliances directly on the skin. It can also be used to adhere silicone appliances or silicone masks to the skin.

PLAT-CAT® Cure Accelerator reduces the cure time of Smooth-On platinum silicones without significantly affecting the ultimate physical properties.

SLO-JO® Cure Retarder extends the pot life (working time) of Smooth-On platinum silicones and Soma Foama® silicone foam without affecting the ultimate physical properties.

FOR USE WITH ALL SILICONES

Silc Pig® Silicone Pigments



Silc Pig® pigments are used for coloring all Smooth-On silicones. Create mind blowing skin effects when used with Psycho Paint® or Skin Tite®. Silc Pig® pigments are concentrated, offer excellent dispersion and consistent color.

Available in a 9-pack Color Sampler

ALSO AVAILABLE: Ignite® Fluorescent Pigments and Cryptolyte® UV Glow Additive See pg. 32 for details!

THI-VEX® II Silicone Thickener is a liquid additive that thickens all Smooth-On mold making silicones, making it easier to fill in undercuts or apply to vertical and inverted surfaces. Different viscosities can be attained by varying the amount of THI-VEX® II added.

SILICONE THINNER® is a non-reactive silicone fluid that will lower the mixed viscosity of Smooth-On silicones.

NOVOCS™ Gloss & Matte Silicone Solvents are low viscosity solvents that evaporate quickly. They will lower viscosity of Smooth-On silicone rubbers and contain no VOC's. They are particularly useful in thinning down Psycho Paint® silicone paint base to apply via brush or airbrush to cured platinum silicone rubber props and prosthetics.

SIL-POXY® Silicone Adhesive is a one component adhesive made specifically for bonding RTV silicone rubber to silicone rubber and other substrates including some plastics (urethane), plasters/ceramics, fabrics, etc. Sil-Poxy® can also be used for repairing torn silicone rubber molds.

Mold Making & Casting Starter Kits

Starter Kits are a great way to introduce anyone to the world of mold making and casting! Print and video instructions take you step-by-step through the process. Great for inventors, artists, candle makers, students, arts & crafts enthusiasts and more!

LIFECASTING KIT:

Skin-safe molding gel lets you make a perfect copy of your hand, etc.

Includes A Lifecasting DVD!

- Alja-Safe® Molding Gel
- Casting Plaster
- Quick Start Guide



BRUSH-ON STARTER KIT:

Make Exact Copies Of 3-Dimensional Models.

Includes A HOW-TO BOOKLET & DVD!

- Rebound® 25 Molding Rubber
- Smooth-Cast® 300 Casting Resin
- Plasti-Paste® II Support Shell Plastic
- 1 oz. Sonite® Wax
- Thi-Vex® II Silicone Thickener
- Quick Start Guide

POURABLE STARTER KIT:

Make Exact Copies Of 2-Dimensional Models.

Includes A HOW-TO BOOKLET & DVD!

- OOMOO® 30 Molding Rubber
- Smooth-Cast® 300 Casting Resin
- 2 oz. SuperSeal® Sealing Agent
- Ease Release® 205 Release Agent
- Quick Start Guide



ULTIMATE WOUND KIT™:

Make Your Own

On-Skin Wounds In Minutes.

Includes A HOW-TO BOOKLET & DVD!

- Start to Finish How-To DVD
- Step-By-Step How-To Guide
- Thi-Vex® Thickening Agent
- Skin Tite® Silicone
- Silc Pig® Pigment
- Rubber Glass® Cured Discs
- Mixing Sticks & Cups



ULTIMATE ZOMBIE KIT™:

Make Your Own

On-Skin Wounds In Minutes.

Includes A HOW-TO BOOKLET & DVD!

- Start to Finish How-To DVD
- Step-By-Step How-To Guide
- Thi-Vex® Thickening Agent
- Skin Tite® Silicone
- Silc Pig® Pigment
- Makeup
- Rubber Glass® Cured Discs
- Zombie Teeth
- Mixing Sticks & Cups



Hands-On Seminars

Smooth-On's Mold Making & Casting Seminars continue to be extremely popular and sell out months in advance. The two-day sessions at our facility in Easton, PA attract a wide variety of attendees from many fields of art and industry. This is interactive learning at its best! Questions about your specific projects are welcome. For details, visit www.smooth-on.com or scan the QR code below.





VytaFlex® Series

Made Especially for Casting Concrete

VytaFlex® mold rubbers are formulated for casting pigmented/colored concrete. Using Smooth-On's exclusive "V-Polymer" technology. Molds made with VytaFlex rubber offer superior abrasion resistance and durability. They yield castings that are dimensionally precise and color accurate every time.

J.R. Slaw was contracted to produce decorative noise reduction highway panels. VytaFlex® 60 was chosen because of its abrasion resistance and durability.

VytaFlex® 40 is used to make a 2-part mold of a concrete sink basin.

The 900 lb. (408 kg.) VytaFlex® formliner is used to cast 2,000 multi-ton concrete soundproofing panels.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
VytaFlex® 10	1A:1B pbv	3,100 cps	30 min.	24 hrs.	10A	<0.001	27.9	38 pli	1,000%	Off-White
VytaFlex® 20	1A:1B pbv	1,000 cps	30 min.	16 hrs.	20A	<0.001	27.7	60 pli	1,000%	Clear Amber
VytaFlex® 30	1A:1B pbv	1,800 cps	30 min.	16 hrs.	30A	<0.001	27.3	78 pli	1,000%	Off-White
VytaFlex® 40	1A:1B pbv	2,000 cps	30 min.	16 hrs.	40A	<0.001	26.9	82 pli	660%	Off-White
VytaFlex® 50	1A:1B pbv	2,000 cps	60 min.	16 hrs.	50A	<0.001	26.7	102 pli	400%	Off-White
VytaFlex® 60	1A:1B pbv	2,000 cps	60 min.	16 hrs.	60A	<0.001	26.6	136 pli	480%	Off-White

Learn more at: www.smooth-on.com

ReoFlex® Series

For Casting Plaster, Wax, Resins & More

ReoFlex® Series urethane rubbers offer superior physical and performance properties for production casting of wax, plasters, and resins. **ReoFlex®** urethanes are available in 20A, 30A, 40A, 50A and 60A Shore hardnesses.

ReoFlex® mold rubber picks up all the intricate detail from this wall plaque and ceiling medallion.

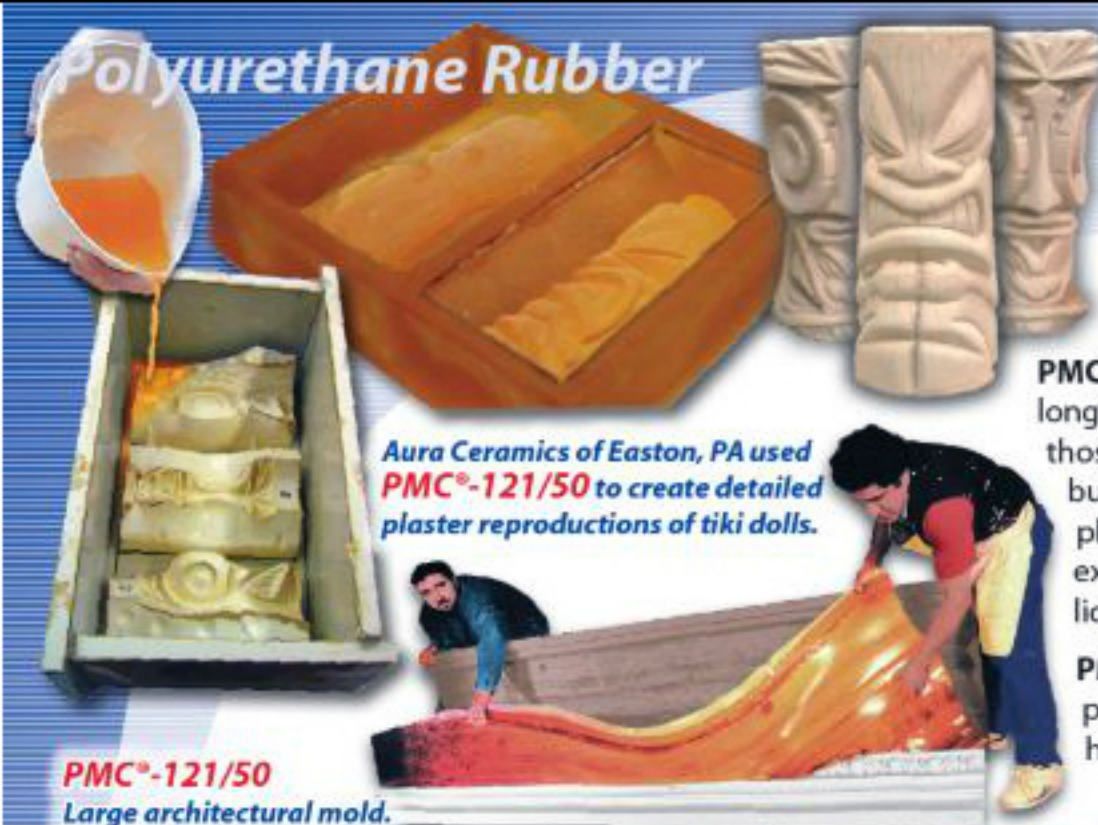
Easy to Use!

ReoFlex® rubbers are widely used to cast wax for candlemaking.

ReoFlex® realistic frog prop casting is painted using thinned Brush-On® 40.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
ReoFlex® 20	1A:1B pbv	1,800 cps	30 min.	16 hrs.	20A	<.0001	27.3	60 pli	1,000%	Off-White
ReoFlex® 30	1A:1B pbv	1,500 cps	30 min.	16 hrs.	30A	<.0001	27.5	82 pli	1,000%	Off-White
ReoFlex® 40	1A:1B pbv	1,500 cps	30 min.	16 hrs.	40A	<.0001	27.2	85 pli	1,000%	Off-White
ReoFlex® 50	1A:1B pbv	2,000 cps	50 min.	16 hrs.	50A	<.0001	27.4	120 pli	435%	Off-White
ReoFlex® 60	1A:1B pbv	1,800 cps	50 min.	16 hrs.	60A	<.0001	26.7	132 pli	581%	Off-White

Learn more at: www.smooth-on.com



PMC® Series

PMC®-121/30 (Wet or Dry) & PMC®-121/50

PMC®-121/30 Dry and **PMC®-121/30 Wet** are longtime favorites of artists, candlemakers and those casting plasters. The wet version contains a built-in release agent to aid in demolding hard plasters and concrete. The dry version does not exude an oil and can be used for casting waxes, liquid plastics, gypsum plasters, etc.

PMC®-121/50 is a "wet-only" version with similar properties to **PMC®-121/30** but has a slightly higher Shore Hardness (50A durometer).

PMC®-744

PMC®-744 has been used for years by mold making professionals to cast wax, plaster, concrete, resins, etc. It is excellent for making molds that are strong, durable and dimensionally stable.

PMC®-744
ceramic
bunny case
mold.



PMC®-746

PMC®-746 was developed to make molds for casting gypsum plasters. Because of its durability and moisture resistant properties it is also used by zoos and museums for a variety of mold making, display and exhibit applications. Other applications include making plaster block molds, reproducing ornamental plaster (architectural restoration), and resin casting.

PMC®-746 molds are used for casting heavily filled polyester furniture elements at Union City Mirror in New Jersey.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
PMC®-121/30 Dry	1A:1B pbv	1,800 cps	30 min.	16 hrs.	30A	<0.001	26.7	75 pli	1,000%	Clear Amber
PMC®-121/30 Wet	1A:1B pbv	1,800 cps	30 min.	16 hrs.	30A	<0.001	26.7	75 pli	1,000%	Clear Amber
PMC®-121/50 Wet	1A:1B pbv	1,400 cps	30 min.	16 hrs.	50A	<0.001	26.7	85 pli	500%	Clear Amber
PMC®-744	2A:1B pbv	3,400 cps	15 min.	16 hrs.	44A	<0.001	27.5	90 pli	400%	Beige
PMC®-746	2A:1B pbv	1,200 cps	15 min.	16 hrs.	60A	<0.001	26.9	100 pli	650%	Clear Amber

PMC® Series

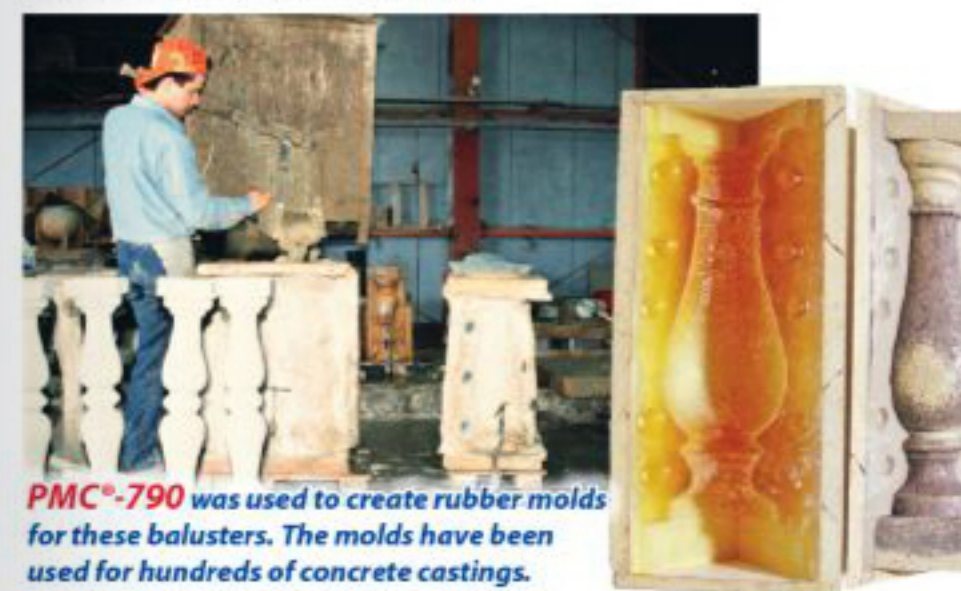
Industrial Rubbers

PMC®-770, 780 & 790

The **PMC®** line of hard urethane rubbers is used for an endless variety of industrial casting applications. Available in Shore 70A, 80A and 90A durometers, they are dimensionally stable and feature exceptional physical properties, including high impact resistance and tensile strength.

These rubbers are mixed 2A:1B by volume and offer extra long working times for pouring large or complicated forms. Superior abrasion resistance makes these urethanes the perfect choice for making molds for casting concrete and making ball mill liners.

They are also used to make industrial rollers and belts, rubber mechanical parts (such as gaskets, wheels, and pulleys) and vibration/shock pads. They are also used as powerful flexible adhesives for industrial bonding applications.



Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
PMC®-770	2A:1B pbv	3,000 cps	30 min.	16 hrs.	70A	<0.001	26.5	200 pli	750%	Light Amber
PMC®-780 Dry	2A:1B pbv	2,000 cps	25 min.	48 hrs.	80A	<0.001	27.2	200 pli	700%	Light Amber
PMC®-790	2A:1B pbv	3,000 cps	20 min.	48 hrs.	90A	<0.001	25.9	300 pli	550%	Clear Amber
Econ® 80	1A:1B pbv	1,200 cps	13 min.	6 hrs.	80A	0.0014	26.16	77 pli	127%	Translucent

NEW **Econ® 80** is a lower cost 80A rubber compared to our popular **PMC®-780**. It is mixed 1A:1B by volume, has a relatively low viscosity, no odor and cures quickly. It does have lower physical properties compared to **PMC®-780** but is suitable for many industrial applications including making highly impact resistant prototype parts, fast concrete stamping pads and fast pour-in-place gaskets for equipment and concrete burial vaults.

PMC®-780 is used to create wear resistant bushings.



NEW

Brush-On® Series

Ideal for Vertical or Inverted Surfaces

Smooth-On's **Brush-On®** urethane mold rubbers are known for having high tear strength and exceptional abrasion resistance, making them a favorite of concrete casters around the world.

Available in 35A, 40A, 50A or 60A durometer, these are "paste-liquid" systems that are easy to use and hold vertical or inverted surfaces without sagging. Rubber cures with minimal shrinkage and molds last a long time for production casting of concrete, gypsum, wax and other materials.

MJM Studios applied **Brush-On® 40** on-site to create the architectural mold used to restore the arch atop New York City's landmark Bellevue Hospital.

Versatile – DID YOU KNOW?

Brush-On® rubbers are also used for a variety of industrial applications including making wear and water resistant coatings for fabric and other surfaces, and as flexible adhesives for bonding like and unlike surfaces.

Brush-On® 50 was center stage during Chicago's Garfield Park Field House restoration. 17' x 11' GFRP dome panels were cast from the molds below.

Adding **50-Strong®** colorant to every other layer aids in differentiating between coats so you are sure to achieve an even coverage.

Brush-On® 60 was used to create the highly detailed mold for this boy scout statuette from Maslyn Studios.

EZ-Mix® 40

EZ-Mix® 40 is a very easy to mix "liquid-liquid" urethane rubber that is great for beginners. **EZ-Mix®** rubber is a favorite with sculptors and is good for casting wax or gypsum.

Product Name	A-B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Brush-On® 35	1A:1B pbv	Brushable	20 min.	16 hrs.	35A	<0.001	21.5	57 pli	1,000%	Grey-Green
Brush-On® 40	1A:1B pbv	Brushable	20 min.	16 hrs.	40A	<0.001	23.7	60 pli	1,000%	Off-White
Brush-On® 50	1A:1B pbv	Brushable	20 min.	16 hrs.	50A	<0.001	23.7	80 pli	400%	Off-White
Brush-On® 60	1A:1B pbv	Brushable	20 min.	16 hrs.	60A	<0.001	23.7	80 pli	400%	Off-White
EZ-Mix® 40	1A:1B pbv	Brushable	18 min.	16 hrs.	40A	<0.001	27.0	67 pli	577%	Grey

Clear Flex® Series

Optically Clear, Flexible and UV Resistant

Clear Flex® are tough rubbers that are optically clear and used for applications including encapsulation, making prototype parts, props and special effects. Choose between a flexible 30A and 50A, or a semi-rigid 95A. All are UV resistant and are easily color pigmented for a variety of effects.

Clear Flex® 30 is a newly formulated product that is flexible, and does not contain mercury or phthalates.

Clear Flex® 50

is used to encapsulate reflective materials in a free-spinning head on TopGun fishing lures. Fish cannot resist!

Clear Flex® 95

Casino themed objects were encapsulated inside this elevator handrailing bumper.

Product Name	A-B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
Clear Flex® 30	1A:1B pbv	750 cps	15 min.	16 hrs.	30A	.002	26.9	54 pli	675%	Clear
Clear Flex® 50	1A:2B pbw	250 cps	25 min.	24 hrs.	50A	.0015	27.7	25 pli	500%	Clear
Clear Flex® 95	1A:1.5B pbw	250 cps	25 min.	24 hrs.	95A	.0028	27.2	200 pli	175%	Clear

FMC® Polysulfide

Time Tested FMC Polysulfide

Used by artists and industry for over 60 years, **FMC®** Polysulfide rubbers are soft and very strong...perfect for making molds of originals with deep undercuts. They can be applied to wet models or sulfur based clays without inhibition. Molds last for years in your mold library.

From polysulfide molds, gypsum segments are assembled to make steel molds used to make production tires.

FMC® rubber was used to mold an 8 ft. (2.4 m) clay model of a horse based on Leonardo DaVinci drawings and chronicled in National Geographic Magazine.

Product Name	A-B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Tear Strength	Elongation at Break %	Color
FMC® 200	100A:12B pbw	6,000 cps	50 min.	16 hrs.	20A	<.0001	20.5	31 pli	700%	Black
FMC® 201	100A:12B pbw	6,000 cps	50 min.	16 hrs.	15A	<.0001	20.5	30 pli	700%	Black
FMC® 205	100A:12B pbw	6,000 cps	90 min.	16 hrs.	12A	<.0001	20.1	27 pli	550%	Black

Smooth-Cast® Series

General Purpose Casting Resins

Smooth-Cast® 300 Series - Bright White

Smooth Cast® 300 Series liquid plastics are ultra-low viscosity casting resins that yield castings that are bright white and virtually bubble free. Vacuum degassing is not necessary. They offer the convenience of a one to one mix ratio (one part A to one part B by volume). Fully cured castings are tough, durable, machinable and paintable. They resist moisture and mild solvents. Applications for **Smooth-Cast® 300 Series** plastics include reproducing small to medium size sculptures, making prototype models, and special effects props.



Production Ready



Fast-Setting, Durable, and Perfectly Detailed

Smooth-Cast® 320 Series - Off-White

The **Smooth-Cast® 320 Series** liquid plastics are "sister" products to our popular Smooth-Cast® 300 Series but cure **off-white**.

They are easier to color using SO-Strong® or Ignite® color tints. **Smooth-Cast® 320 Series** resins also

readily accept fillers (such as URE-FIL® 3, 5 and 7). Fully cured castings are tough, durable, machinable and paintable. They resist moisture and mild solvents. Applications for **Smooth-Cast® 320 Series** resins include reproducing small to medium size sculptures, making prototype models, special effects props, decorative jewelry and taxidermy (bones, antlers, teeth etc.).



Perfectly Detailed



Smooth-Cast® 320 Puma Skull



Easy to Paint & Finish

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
Smooth-Cast® 300Q	1:1 pbv	80 cps	30 sec.	4-5 min.	70D	0.01	26.4	3,000 psi	5%	White
Smooth-Cast® 300	1:1 pbv	80 cps	3 min.	10 min.	70D	0.01	26.4	3,000 psi	5%	White
Smooth-Cast® 305	1:1 pbv	80 cps	7 min.	30 min.	70D	0.0065	26.4	3,000 psi	7.5%	White
Smooth-Cast® 310	1:1 pbv	80 cps	15-20 min.	3-4 hrs.	70D	0.0065	26.4	3,000 psi	7.5%	White
Smooth-Cast® 320	1:1 pbv	80 cps	3 min.	10 min.	70D	0.01	26.4	3,000 psi	10%	Off-White
Smooth-Cast® 321	1:1 pbv	80 cps	7-9 min.	30 min.	70D	0.007	26.4	3,000 psi	8%	Off-White
Smooth-Cast® 322	1:1 pbv	80 cps	10-20 min.	2-4 hrs.	70D	0.007	26.4	3,000 psi	8%	Off-White

Learn more at: www.smooth-on.com

Smooth-Cast® Series

General Purpose Casting Resins

Smooth-Cast® 325 ColorMatch Series

Smooth-Cast® ColorMatch® plastics are fast-cast resins that were developed specifically for adding color pigments and fillers to achieve a true color representation or filler effect. The **ColorMatch® Series** is formulated "color neutral." Small amounts of SO-Strong® color tint will yield accurate, vivid colors from cured castings. Because of its neutral color, the ColorMatch® Series is ideal for creating marble and woodgrain casting effects, or duplicating the look of real metal by adding bronze, brass or other metal powder.



EASIEST TO COLOR



Woodgrain Effect



Cold Cast Metal Effect

Smooth-Cast® ONYX® - Deep Black

Smooth-Cast ONYX® is a mercury-free urethane resin that cures quickly at room temperature to a deep black, solid plastic. **ONYX®** has an ultimate shore hardness of 80D and offers higher physical properties and higher heat resistance vs. other general purpose resins. Applications include reproducing sculpture, making prototypes and potting/encapsulation. Because **ONYX®** is a fast curing resin and becomes hard quickly, it is also great for doing fast cold cast bronze, brass, copper, nickel/silver and other metals.



Fast Cure



Deep Black Color



Smooth-Cast® ONYX® is combined with different metal powders to achieve a realistic metal finish.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
Smooth-Cast® 325	1:1 pbv	100 cps	2.5 min.	10 min.	72D	0.01	25.9	3,170 psi	10%	Clear Amber
Smooth-Cast® 326	1:1 pbv	100 cps	7-9 min.	60 min.	72D	0.0075	25.9	3,170 psi	10%	Clear Amber
Smooth-Cast® 327	1:1 pbv	100 cps	10-20 min.	2-4 hrs.	72D	0.0075	25.9	3,170 psi	10%	Clear Amber
Smooth-Cast® ONYX® FAST	1:1 pbv	100 cps	2.5 min.	10-15 min.	80D	0.01	27.7	5,840 psi	4%	Black
Smooth-Cast® ONYX® SLOW	1:1 pbv	100 cps	5 min.	90 min.	80D	0.012	27.7	7,660 psi	3%	Black

Learn more at: www.smoothon.com/urethaneplastic

Smooth-Cast® Series

General Purpose Casting Resins

Smooth-Cast Semi-Rigid Resins

Smooth-Cast® semi-rigid resins are available in different hardnesses.

Smooth-Cast® 45D, 60D, 61D, 65D and 66D are low-cost urethane casting resins that cure quickly to semi-rigid plastics that offer excellent impact resistance. These plastics are easy to use (mix ratio is 1A:1B by volume) and have low viscosities for minimal bubble entrapment. Vibrant colors are possible by adding SO-Strong® color tints or Ignite® color pigments.

These semi-rigid plastics will really take a beating and offer exceptional abrasion resistance. They are good for making high-impact resistance tools, prototypes, etc.

Smooth-Cast® Semi-Rigid Resin 'Shore D' Hardness Comparison:

SC 45D	SC 60D & 61D	SC 65D & 66D	70D (for comparison)
Softer, Bendable	Some Flexibility	Semi-Rigid	Rigid, Not Flexible

Dozens of Smooth-Cast® 65D boulders were cast to launch the latest JEEP® model at the New York Auto Show.



Smooth-Cast® 65D

(Formerly Smooth-Cast® ROTO®)

is unique among the semi-rigid resins. It has a gradual cure profile making it ideal for rotational casting applications. It can be cast hollow or filled with foam for lightweight reinforcement.



Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
Smooth-Cast® 45D	1:1 pbv	500 cps	5 min.	30 min.	45D	0.01	25.6	1,500 psi	100%	Caramel
Smooth-Cast® 60D	1:1 pbv	1,500 cps	5 min.	30 min.	60D	0.015	26.4	2,200 psi	30%	Caramel
Smooth-Cast® 61D	1:1 pbv	1,500 cps	7 min.	60 min.	61D	0.015	25.6	1,800 psi	20%	Caramel
Smooth-Cast® 65D	1:1 pbv	120 cps	2.5 min.	10-15 min.	65D	0.01	26.4	2,400 psi	20%	White
Smooth-Cast® 66D	1:1 pbv	120 cps	7 min.	60 min.	66D	0.01	26.4	2,400 psi	20%	Grey

Learn more at: www.smooth-on.com

Smooth-Cast® Series

General Purpose Casting Resins

Smooth-Cast® Tooling Resins

Smooth-Cast® 380 tool used to cast a black electronics utility housing.

Smooth-Cast® 380 and 385 are mineral filled urethane casting resins that are very hard and durable. They also cure with low shrinkage. Smooth-Cast® 380 features ultra high density and very low cost. Smooth-Cast® 385 has high compressive and flexural strength. Fully cured castings are tough, machinable and paintable.

Tooling resins are ideal for making industrial parts, foundry patterns, vacuum forming molds, and some ceramic applications.



Smooth-Cast® 385 master molds can be used to cast silicone rubber production molds.



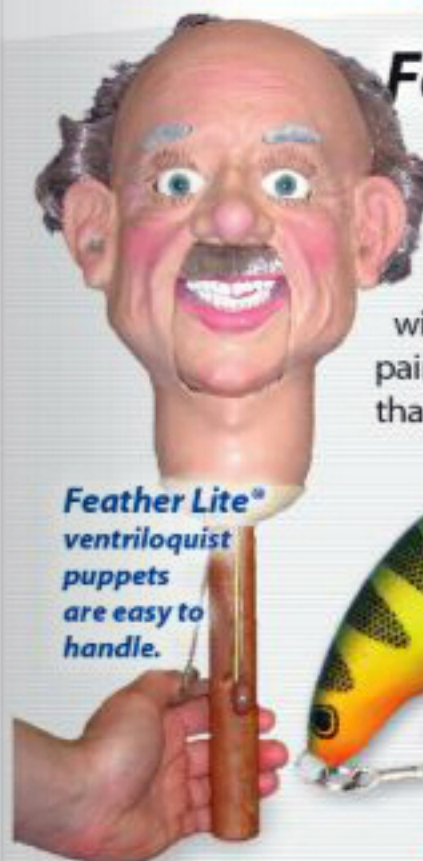
Rigid Smooth-Cast® 385 Propeller Model



Feather Lite® - It Floats In Water!

Feather Lite® is a heavily filled low-density urethane casting resin. Cured plastic is lightweight (it floats in water!) and can be carved, machined, sanded, etc. Feather Lite® can be pigmented with SO-Strong® color tints and finished castings can be painted. Feather Lite® yields more plastic per pound/kg. than other resins, lowering the cost per casting.

Feather Lite® ventriloquist puppets are easy to handle.



Feather Lite® fishing lures that float!



6 ft (1.8 m) long Feather Lite® flying fish on display at the New Jersey Exhibition Center.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
Smooth-Cast® 380	1:1 pbv	1,140 cps	6 min.	60 min.	82D	0.0025	15.9	3,550 psi	1.43%	Tan
Smooth-Cast® 385	1:5 pbw	3,000 cps	20 min.	2 hrs.	85D	0.0006	17.3	3,100 psi	1%	Beige
Feather Lite®	1:1 pbv	410 cps	8.5 min.	2 hrs.	58D	0.003	41.3	2,160 psi	1.6%	Beige

Learn more at: www.smooth-on.com

TASK® Series

High-Performance Casting Resins

TASK® Series plastics are a line of urethane casting resins that offer superior physical properties compared to our popular Smooth-Cast® line of general purpose casting resins. **TASK®** plastics feature convenient mix ratios by volume (pbv) or weight (pbw), low viscosities, high tensile and flexural strength, as well as high flexural modulus.

TASK® 2 & TASK® 3 - Low viscosity, fast cure resins made especially for rapid prototyping environments.

TASK® 4 - With exceptional flexural strength, TASK® 4 plastic was developed to be unbreakable when cast in ultra thin-wall sections - as thin as a sheet of paper.

TASK® 5 & TASK® 6 - Time tested economy performance resins.

TASK® 7 Flame Out® - Low viscosity, fast set resin that meets UL 94 V-O requirements for flame resistance.

TASK® 8 - Heat resistant urethane plastic that can withstand temperatures up to 263°F/129°C.

TASK® 9 ColorMatch - Readily accepts color pigments and yields parts with extraordinary tensile strength.

TASK® 4

has been a regular fixture of prototype shops around the world for over 35 years, helping bring design concepts to market.

TASK® 9 ColorMatch

resin is pigmented to create color-coded paper spool caps for a Manhattan print house.

Flame-resistant **TASK® 7** meets UL 94 V-O requirements. It self extinguishes once the flame is removed.

Assembly fixtures cast in **TASK® 8** are heat-resistant up to 263°F/129°C.

TASK® 2

was used to create prototype oversized remote controls used for consumer testing prior to final production.

TASK® Series

High-Performance Casting Resins

TASK® 11 (formerly C-1509) - Semi-rigid resin originally developed for high impact tooling (drop hammer punch). It also offers good abrasion and chemical resistance.

TASK® 13 & TASK® 14 (formerly C-1515, C-1520) - High impact resistance, low cost semi-rigid plastics are used for a variety of industrial applications including fast mold making, prototyping, durable miniatures, black-colored props and special effects.

TASK® 15 - Exhibits exceptional impact strength when cast in thin-wall sections. TASK® 15 features a gradual cure profile, making it ideal for rotational casting applications.

TASK® 16 - Fast-setting Shore 80A/30D industrial urethane that offers very high tear strength, impact resistance and wear resistance. TASK® can also be rotationally cast for lightweight foam filled castings.

TASK® 18 (formerly C-1508) - Relatively low viscosity aluminum filled urethane resin that was developed specifically for making short run vacuum forming molds.

TASK® 21 - Described by many as having similar performance and mechanical characteristics to ABS plastic, with high compressive and flexural strength as well as good shock absorbance.

TASK® 16 is quick setting, easily pigmented and can be used to cast parts, props, etc. that are flexible and highly impact resistant.

Pressure resistant and shark proof **TASK® 11** used to house deep ocean signal transponders for US Navy.

TASK® 18

resin is heat resistant and very rigid. It is used to make large vacuum form molds for making custom communications satellite covers for Lucent Technologies.

Semi-rigid **TASK® 13**

used for the controller housing for the Laser Rack™ performance power lifting monitor.

Highly impact resistant **TASK® 15** is used for rotational casting mannequin bodies that are durable, hollow and can take a beating.

TASK® 21

video phone prototype housing has similar performance properties to ABS plastic.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
TASK® 2	1:1 pbv	150 cps	7 min.	60 min.	80D	0.005	24.7	6,650 psi	6%	White
TASK® 3	1:1 pbv	150 cps	20 min.	90 min.	80D	0.0025	24.7	6,650 psi	6%	White
TASK® 4	100:100 pbw	250 cps	20 min.	16 hrs.	83D	0.0035	23.9	6,500 psi	4%	Ivory
TASK® 5	1:1 pbv	600 cps	3 min.	15 min.	77D	0.007	25.2	4,530 psi	5%	Tan
TASK® 6	1:1 pbv	800 cps	7 min.	75 min.	75D	0.0031	25.9	5,200 psi	4%	Tan
TASK® 7	1:1 pbv	200 cps	2.5 min.	10 min.	73D	0.0111	23.1	3,390 psi	15.1%	White
TASK® 8	1:1 pbv	100 cps	2.5 min.	10-15 min.	80D	0.01	25.4	5,840 psi	4%	Off-White
TASK® 9	1:1 pbv	300 cps	7 min.	60 min.	85D	0.009	24.3	7,800 psi	6%	Clear Amber

Learn more at: www.smooth-on.com

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
TASK® 11 (C-1509)	100:100 pbw	2,000 cps	20 min.	16 hrs.	60D	0.0024	24.7	2,500 psi	100%	Milky Amber
TASK® 13 (C-1515)	100:120 pbw	800 cps	3 min.	20 min.	95A, 50D	0.005	24.1	1,800 psi	125%	Black
TASK® 14 (C-1520)	100:120 pbw	800 cps	10 min.	45 min.	95A, 50D	0.0035	24.1	1,800 psi	125%	Black
TASK® 15	75:100 pbw	600 cps	6 min.	60 min.	75D	0.0042	24.7	2,720 psi	20%	Opaque White
TASK® 16	1:2 pbw	1,400 cps	6 min.	90 min.	80A, 30D	0.0025	25.6	2,264 psi	233%	Light Yellow
TASK® 18 (C-1508)	26:100 pbw	4,400 cps	20 min.	16 hrs.	88D	0.0006	17.6	3,250 psi	1%	Metal Gray
TASK® 21	2:1 pbv	500 cps	6 min.	60 min.	75D	0.0058	25.9	5,500 psi	7.5%	White

Learn more at: www.smooth-on.com

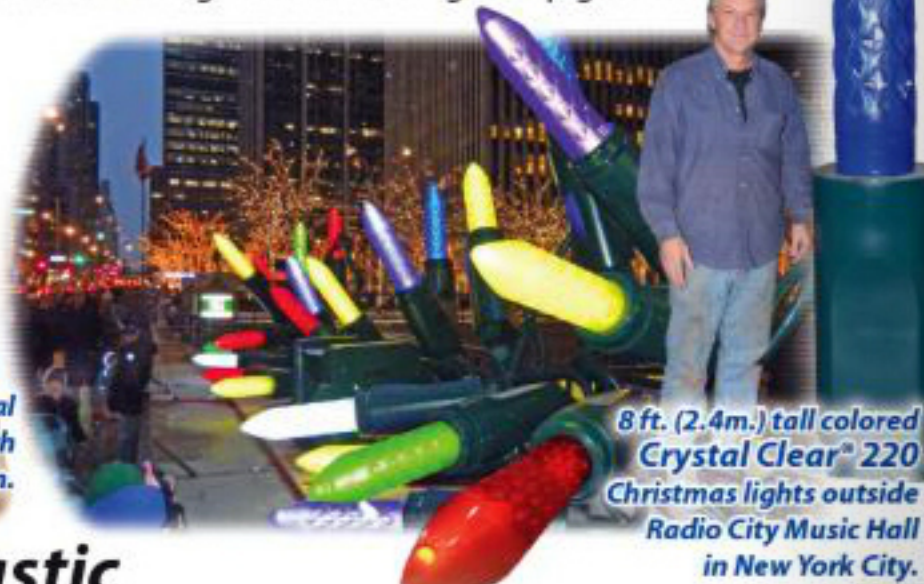
Specialty Plastics

Crystal Clear® Series - Water Clear & UV Resistant

Crystal Clear® resins are unique water clear plastics that have been used for years to create spectacular large scale display castings (10 tons and larger), prototype models, lenses, ice effects for movie special effects and much more. There are different working time/demold time formulas to choose from depending on requirements. Impactful color effects are made with SO-Strong® color tints or Ignite® pigments.

Crystal Clear® resin used to cast 8 ft. (2.4m.) tall Buddha that resides high on a hilltop overlooking Hong Kong.

Highly detailed crystal skull prop created with **Crystal Clear®** resin.



8 ft. (2.4m.) tall colored **Crystal Clear® 220** Christmas lights outside Radio City Music Hall in New York City.

SMASH!® Breakaway Plastic

SMASH!® Plastic is a urethane liquid plastic designed to shatter/crumble on impact ("breakaway glass"). **SMASH!®** is water clear and, once fully cured, shatters like glass. It can be cast solid in thin sections to make window panes or rotationally cast to form hollow bottles, jars or other glass-like objects to be used as breakable props for film and stage productions.

Over six tons of **SMASH!®** Plastic were used in the James Bond film, 'Die Another Day,' including a scene where 007 drives his Aston Martin through huge ice palace doors made of **SMASH!®** Plastic.

SMASH!® Plastic is "Actor-Safe"

Simply **SMASH!®**-ing!

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
Crystal Clear® 200	100:90 pbw	600 cps	20 min.	16 hrs.	80D	0.001	26.7	2,500 psi	10%	Clear
Crystal Clear® 202	100:90 pbw	600 cps	9 min.	90 min.	80D	0.0125	26.7	3,500 psi	10%	Clear
Crystal Clear® 204	100:90 pbw	600 cps	2 hrs.	48 hrs.	80D	0.002	26.7	3,500 psi	10%	Clear
Crystal Clear® 206	100:90 pbw	600 cps	4 hrs.	5 days	80D	0.002	26.7	2,500 psi	10%	Clear
Crystal Clear® 220	100:75 pbw	675 cps	22 min.	overnight*	85D	0.0173	25.9	8,190 psi	12%	Clear
SMASH!® Plastic	1:1 pbv	900 cps	5 min.	90 min.	80D	0.0125	26.7	N/D	N/D	Clear

* Material requires post-cure. Refer to technical bulletin for details.

Learn more at: www.smooth-on.com

Specialty Plastics

Simpact® 85 Tough 85A Urethane

Simpact® 85 is a low odor, fast-setting Shore 85A urethane that offers very high tear strength, impact resistance and wear resistance. **Simpact® 85** is phthalate free, mercury free and MOCA free. Cured rubber has exceptional performance characteristics and dimensional stability. **Simpact® 85** can be colored with SO-Strong® or Ignite® colorants. **Simpact® 85** is suitable for making impact resistant props, prototypes and display pieces.



Simpact® 85 is on the border between being a rubber and a plastic. This attributes to its toughness and durability, and makes it a favorite among aquarium customers.

Plasti-Paste® II Trowelable Plastic Paste

Plasti-Paste® II is a low-cost fiber-filled resin that holds a vertical surface without sagging and cures to a strong, durable and lightweight plastic. Developed originally as a mother mold material, this plastic can also be used for creating themed environments or special effects. Cured plastic can be sanded, machined and painted with acrylic enamel paints.

Plasti-Paste® II holds a vertical surface without sagging for making lightweight mother molds.

Plasti-Paste® II is easily applied into a rubber mold or over an armature to create amazing themed environments and sculptures.



Plasti-Paste® II, Fully Paintable!

Shell Shock® Brushable Liquid Plastic

Shell Shock® FAST and SLOW are thixotropic plastics that self-thicken when mixed and can be brushed onto a variety of surfaces or into rubber molds. Material cures at room temperature with minimum shrinkage to a hard, durable plastic. Fully cured castings are rigid and can be sanded, primed and painted. **Shell Shock®** is ideal for making fast, lightweight rigid molds for creating silicone appliances and effects.

Shell Shock® rigid molds are used to create film-quality silicone masks.

A foam sculpture created by artist Fran Volz was coated with **Shell Shock®** and then sanded, primed and painted.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Specific Volume (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
Simpact® 85	85:100 pbw	1,100 cps	4 min.	2 hrs.	85A	0.007	25.4	1,573 psi	164%	Off-White
Plasti-Paste® II	1:2 pbv	Paste	10 min.	90 min.	70D	0.005	27.73	2,150 psi	1.14%	Off-White
Shell Shock® Fast	1:4 pbv	3,000 cps	3 min	60 min.	85D	0.0006	17.3	3,100 psi	0.4%	Beige
Shell Shock® Slow	1:4 pbv	3,000 cps	8 min	5 hrs.	85D	0.0006	17.3	3,100 psi	0.4%	Beige

Learn more at: www.smooth-on.com

FOAM-iT!® Series

FOAM-iT!® expanding foams are easy to use and cure **rigid** and **strong**. They can be used as a **lightweight** casting material, backfill material for encapsulation or to make hollow castings. You can color them with **SO-Strong®** color tints for a variety of art/craft, industrial or special effects applications.

FOAM-iT!® 5 and Cast Magic® Bronzoner™ powder produces a finished lightweight casting in a matter of minutes for a custom look.



Cast custom block of FOAM-iT!® 8 is used as a machinable modeling board.

FOAM-iT!® 26

FOAM-iT!® 15

FOAM-iT!® 10

FOAM-iT!® 8

FOAM-iT!® 5

FOAM-iT!® 3

FOAM-iT!® 3 Rigid Foam used to create quick, strong support shells.

8 fluid ounces (237ml) of liquid material was poured for each foam example displaying the volumetric rate of expansion.

Product Name	A:B Mix Ratio By Volume	Pot Life (Crown Time) (ASTM D-2471)	Tack-Free Time	Handling Strength	Demold Time	Volumetric Yield (cu. in./lb.)	Lbs./Cubic Foot	Kgs./Cubic Meter	Approx. Volumetric Expansion	Color
FOAM-iT!® 3	1A:1B pbv	1 min.	6.5 min.	20 min.	2 hrs.	577	3 lb/ft³	48 kg/m³	18 times	Beige
FOAM-iT!® 5	1A:1B pbv	1.5 min.	5 min.	20 min.	2 hrs.	346	5 lb/ft³	80 kg/m³	10 times	Beige
FOAM-iT!® 8	2A:1B pbw	1.5 min.	5 min.	20 min.	2 hrs.	216	8 lb/ft³	128 kg/m³	8 times	White
FOAM-iT!® 10	1A:1B pbv	1.5 min.	5 min.	20 min.	2 hrs.	173	10 lb/ft³	160 kg/m³	6 times	Beige
FOAM-iT!® 10 SLOW	1A:1B pbv	3.5 min.	20 min.	1 hr.	4 hrs.	173	10 lb/ft³	160 kg/m³	6 times	Beige
FOAM-iT!® 15	1A:1B pbv	1.5 min.	4 min.	20 min.	2 hrs.	115	15 lb/ft³	240 kg/m³	4 times	Beige
FOAM-iT!® 26	1A:1B pbv	1.5 min.	5 min.	20 min.	2 hrs.	65	26 lb/ft³	416 kg/m³	2 times	White

Learn more at: www.smooth-on.com

FlexFoam-iT!® Series

FlexFoam-iT!® expanding foams cure **flexible** and **durable**. They are **lightweight** versatile and easy to use. They can be used for padding/cushion material, gasket material, or to make props and special effects. Vibrant colors can be achieved by adding color pigments.

Create incredibly realistic cinder blocks using FlexFoam-iT!® X and SO-Strong® tints.



FlexFoam-iT!® 25

FlexFoam-iT!® 17

FlexFoam-iT!® 14

FlexFoam-iT!® X

Pillow Soft! FlexFoam-iT!® VIII

FLAME RATED! FlexFoam-iT!® 7 FR

Pillow Soft! FlexFoam-iT!® 6

FlexFoam-iT!® V

TUFF STUFF! FlexFoam-iT!® 4

FlexFoam-iT!® III

Need a Silicone Foam? Find Soma Foama® on pg. 10!



Incredibly realistic food displays using FlexFoam-iT!® X.

Product Name	A:B Mix Ratio By Volume	Pot Life (Crown Time) (ASTM D-2471)	Tack-Free Time	Handling Strength	Demold Time	Volumetric Yield (cu. in./lb.)	Lbs./Cubic Foot	Kgs./Cubic Meter	Approx. Volumetric Expansion	Color
FlexFoam-iT!® III	1A:2B pbv	35 sec.	25 min.	30 min.	2 hrs.	577	3 lb/ft³	48 kg/m³	15 times	White
FlexFoam-iT!® 4	80A:100B pbw	35 sec.	20 min.	25 min.	2 hrs.	275-300	5 lb/ft³	80 kg/m³	10 times	White
FlexFoam-iT!® V	1A:1B pbv	50 sec.	25 min.	30 min.	2 hrs.	346	5 lb/ft³	80 kg/m³	10 times	White
FlexFoam-iT!® 6	1A:1B pbv	35 sec.	2 hrs.	30 min.	2 hrs.	275-300	5 lb/ft³	80 kg/m³	10 times	White
FlexFoam-iT!® 7 FR	1A:1B pbv	35 sec.	2 hrs.	30 min.	2 hrs.	240-260	7 lb/ft³	110 kg/m³	8 times	White
FlexFoam-iT!® VIII	1A:2B pbv	50 sec.	25 min.	30 min.	2 hrs.	200	8 lb/ft³	128 kg/m³	8 times	White
FlexFoam-iT!® X	1A:1B pbv	50 sec.	25 min.	30 min.	2 hrs.	173	10 lb/ft³	160 kg/m³	6 times	White
FlexFoam-iT!® 14	1A:2B pbv	60 sec.	25 min.	30 min.	2 hrs.	123	14 lb/ft³	224 kg/m³	4 times	White
FlexFoam-iT!® 17	1A:2B pbv	60 sec.	25 min.	30 min.	2 hrs.	103	17 lb/ft³	270 kg/m³	3.5 times	White
FlexFoam-iT!® 25	1A:2B pbw	50 sec.	25 min.	30 min.	2 hrs.	69	25 lb/ft³	400 kg/m³	2 times	White

Learn more at: www.smooth-on.com

Polyurethane Accessories

Quarry Tone® Granite FX Filler Powders

Quarry Tone® Powders are the fastest way to create realistic granite and stone effects in minutes!



**TEN
Variations to
Choose From!**



Metal Powders For Cold Casting

Metal Powder + Resin

produces a finished casting that gives the appearance and feel of solid metal at a fraction of the cost of real metal.



Ceremonial cold cast bronze dagger created by Sam Cobb

CASTING F/X

GLITTERS

- * Flamus Red
- * Gold Rush
- * Silver Ghost
- * Fish Scale Gold

METALLICS

- * Bronzonker
- * Red Devil
- * Gold Finger
- * Silver Bullet
- * Copper Tone
- * Metallic Green

PEARL ESSENCE

- * Pearly Blue
- * Pearly Green

Cast Magic® Powders

Cast Magic® Powders are the fastest way to make metal and glitter effects. Create spectacular casting effects in a matter of minutes!

Dragon Skin® 10 with Cast Magic® Bronzonker® mixed in.



Polyurethane Accessories

FILLERS

URE-FIL® Fillers are low cost, lightweight fillers that are easily dispersed in most Smooth-On resins to attain different finishes and effects.

URE-FIL® 3 is a ceramic filler that will give plastic castings a ceramic or porcelain-like finish.

URE-FIL® 5 is a lightweight filler that is your best choice for achieving a wood effect with plastics.

URE-FIL® 7 provides dimensional stability, economy & improved flame resistance.

URE-FIL® 9 is a lightweight filler that can be added to urethane as a thickener for brush-on applications.

URE-FIL® 11 is a fiber-based filler that can be added to all Smooth-On products to thicken for brush-on applications.

URE-FIL® 15 micro-balloons that can be added to Smooth-On urethane plastics to create very light weight castings.



SO-Strong® Colorants can be added to any Smooth-On liquid urethane rubber, urethane plastic, epoxy or urethane foam. Used to create a variety of color effects.



Now sold in convenient Sampler size!



Ignite® Fluorescent Pigments

Ignite® pigments make castings come alive. The fluorescent or "glow" effect is maximized under black light.

*Magenta Orange White Pink
Green Purple Yellow Red Blue*



Available in a 9-pack Color Sampler.

Cryptolyte® UV Glow Additive

Cryptolyte® causes castings to glow bright blue under a focused ultra violet light.



ADDITIVES

SUN DEVIL® Slows color change and physical degradation due to UV exposure.

SO-CURE® Accelerates the cure time of liquid urethane plastic products.

KICK-IT® Accelerates the cure time of liquid urethane rubber products.

SO-FLEX® Softening agent that lowers the durometer of Smooth-On urethane rubbers.

XTEND-IT® Dry gas blanket designed to extend the shelf life of unused moisture sensitive polyurethane products.



Laminating,
Surface Coat
Epoxies

EpoxAmite® Series
Laminating System

EpoxAmite® 100 Epoxy Laminating System is an easy-to-use liquid epoxy system formulated for a wide variety of fabrication applications. **EpoxAmite® 100** Laminating System is unfilled, low in viscosity, odorless and cures at room temperature. Cured epoxy displays exceptional physical and performance properties. It can be sanded, shaped, machined, drilled, tapped and painted.



EpoxAmite® 100 Laminating System can be used with reinforcements such as S-Glass, E-Glass, Kevlar and carbon fibers for lay-up applications or composite parts. **EpoxAmite® 100** can also be mixed with fillers such as fumed silica for gel coat applications. **URE-FIL® 3**, **URE-FIL® 7** and other fillers can be added for fairing, filleting or bonding applications.

Three
Speeds!

- 101 Fast
- 102 Medium
- 103 Slow



EpoxAcoat® RED or GREY is a thixotropic epoxy gel coat that is widely used for hand laminating/tooling applications. It is a tough and strong surface coat resin that cures at room temperature and offers exceptional abrasion resistance. **EpoxAcoat®** is easy to use, wets out well over a variety of surfaces and will coat vertical surfaces without sagging. It is designed to complement and work well with our **EpoxAmite®** Laminating System (used as a backup for making tools, patterns, fixtures, etc.).



Ultra-tough **EpoxAcoat®** tool is ready to make prototype/production composite parts for motorcycles.

Product Name	A-B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Ultimate Tensile	Compressive Strength	Color
EpoxAmite®101 Fast	100A:24B pbw	1,000 cps	11 min.	6-8 hrs.	84D	N/A	24.5	7,930 psi	11,550 psi	Clear Yellow
EpoxAmite®102 Medium	100A:29B pbw	650 cps	22 min.	10-15 hrs.	80D	N/A	25	8,180 psi	10,970 psi	Clear Yellow
EpoxAmite®103 Slow	100A:28.4B pbw	650 cps	55 min.	24 hrs.	80D	N/A	25.2	7,910 psi	10,500 psi	Clear Yellow
EpoxAcoat® RED	100A:15B pbw	Paste	20 min.	16 hrs.	85D	.00015	18.5	26,000 psi	24,000 psi	Red
EpoxAcoat® GREY	100A:15B pbw	Paste	20 min.	16 hrs.	85D	.00015	18.5	26,000 psi	24,000 psi	Grey

EpoxAcast®

Castable Epoxies

castable epoxies are used for a variety of industrial applications. They are easy to use, contain no VOC's and are solvent free. Compared to Smooth-Cast® or TASK® urethane plastics, **EpoxAcast®** epoxies are generally harder, have higher compression strength as well as higher heat and abrasion resistance. They are also widely used for electrical encapsulation and bonding applications.

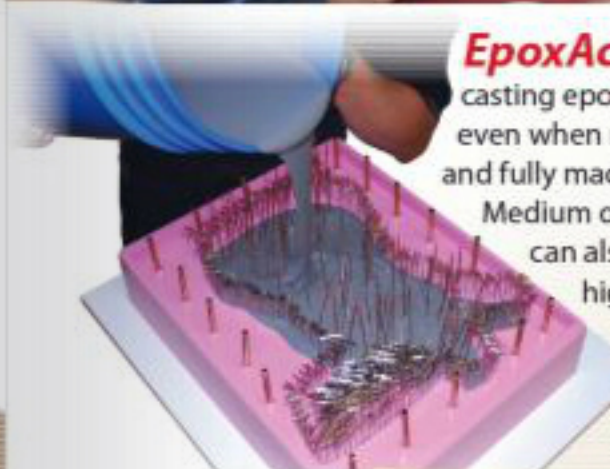


EpoxAcast® 650 is a mineral filled general purpose casting epoxy that is low cost and versatile. It features a low mixed viscosity for minimal bubble entrapment. Choose Fast, Medium or Slow catalyst to fit your project. You can also use HT Hardener to give your castings higher heat resistance. **EpoxAcast® 650** is used for making hard dies for metal stamping as well as patterns and fixtures. It is also used for electrical encapsulation to extend the life cycles and enhance the performance of potted electronic devices.



EpoxAcast® 650 is used for encapsulating sensitive electronics.

EpoxAcast® 650's high compressive strength makes it ideal for making stamping dies that withstand 20 tons of pressure for production pressing of copper metal ornaments.



EpoxAcast® 655 is an aluminum filled casting epoxy that is dimensionally stable even when mass cast. It is thermally conductive and fully machineable when cured. Choose Fast, Medium or Slow catalyst to fit your project. You can also use HT Hardener to give your castings higher heat resistance. **EpoxAcast® 655** is used for making vacuum forming dies, injection molds, foundry patterns and tooling fixtures.



EpoxAcast® 655 is commonly used for vacuum forming dies.



EpoxAcast® 670 HT High Temp Castable Epoxy
EpoxAcast® 670 HT offers exceptional high temperature resistance to 350°F / 177°C and low shrinkage. It is used for making high temp resistant industrial parts and tooling, high-speed hard rollers, prototype injection molds, vacuum forming dies and fixtures.

EpoxAcast® 670 is used to make prototype high heat injection molds.



EpoxAcast® 690 Clear is a UV resistant clear casting epoxy that is ideal for making clear jewelry/beads or replacement lenses for kit cars, etc. Color with **SO-Strong®** color tints. Also suitable for making clear molds and prototype parts.

EpoxAcast® 690 is perfect for resin jewelry craft.

Optically clear lens for projector prototype.



Product Name	A-B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Ultimate Tensile	Compressive Strength	Color
EpoxAcast® 650 Fast*	100A:12B pbw	7,000 cps	20 min.	1 hr.	93B	.001	18.22	6,000 psi	16,350 psi	Off-White
EpoxAcast® 655 Fast*	100A:10B pbw	23,000 cps	30 min.	3 hrs.	90D	.0006	16.7	4,810 psi	12,500 psi	Grey
EpoxAcast® 670 HT	100A:16B pbw	6,000 cps	3 hrs.	24 hrs.	90D	.002	20.5	4,500 psi	13,000 psi	Beige
EpoxAcast® 690 Clear	100A:30B pbw	200 cps	5 hrs.	24 hrs.	80D	.002	25	6,630 psi	9,610 psi	Clear

Values are mass and configuration dependant. *Also compatible with Medium and Slow speed catalyst

UV
Resistant!

Specialty Epoxies

Tarbender® is a UV resistant clear liquid epoxy that can be poured over a variety of surfaces to provide a strong, high gloss coating. Parts A and B mix together and flow easily. **Tarbender®** epoxy cures at room temperature and offers high impact resistance. **Tarbender®** is an excellent wood bar top coating and can also be poured over plaster, concrete, foam, fabrics, etc. You can use **Tarbender®** to encapsulate 3-D objects or coat flat objects, paper and more.

Tarbender® is ideal for encapsulating objects. For this application, sea shells and other ocean themed pieces are used.

Epsilon® EPS Foam Coating Epoxy is a two-part thixotropic epoxy coating that self thickens for brushing onto a variety of surfaces without sagging. This product was developed for fabricators that regularly coat EPS foam. Cured material is easily sanded, primed and painted. When applying to vertical surfaces, **Epsilon®** wets out uniformly. Only 2 layers minimum are required to build an adequate thickness and provide an impact resistant coating.

You can pigment **Epsilon®** with **SO-Strong®** color tints. Some users add color to every other layer to ensure thorough coverage.

Free Form® - Air Epoxy Putty

is an extremely lightweight epoxy putty suitable for an infinite variety of industrial and art-related applications. This low-odor, low shrinkage putty is unique, inexpensive and easy to use. Use to make rigid support shells or mother molds, as a filleting material in epoxy tooling, or in between layers of **EpoxAmite®** and fiberglass cloth, carbon or other fiber for making lightweight composite parts.

Mix

Apply

Let Cure

Free Form® - Air Epoxy Putty can be used as a filleting material in epoxy tooling.

Mix

Free Form® - Earth® Epoxy Putty

is an extremely strong, clay-like epoxy putty suitable for many an infinite variety of industrial and art-related applications. This is a low-odor, low-shrink putty that is unique, inexpensive and easy to use for sculpting fine detail by hand or using tools. **Free Form® Earth®** cures to a hard, rigid epoxy that is very strong, chemically resistant, and waterproof.

Let Cure

Free Form® - Sculpt® Epoxy Putty

is a sculptable epoxy clay that requires no firing and will self-cure in a short time to an extremely hard and durable state with virtually no shrinkage. **Free Form® Sculpt®** is 30% lighter than similar products and holds vertical surfaces better. It has an ultra fine particle size that gives the user the ability to sculpt finer detail with better precision using tools or shaping by hand.

Free Form® Detailer® is a low viscosity liquid that makes adding details and detail effects to the surface of **Free Form® Sculpt®** Epoxy Putty easy.

Free Form® Earth® and **Free Form® Sculpt®** do not contain crystalline silica (a known carcinogen). They can both be safely sanded, shaped, drilled, tapped, and painted.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Ultimate Tensile	Compressive Strength	Color
Tarbender®	2A:1B pbv	1100 cps	45 min.	16 hrs.	75D	N/A	25.4	N/A	N/A	Clear
EPSILON® w/ 101 Fast	100A:20B pbw	Variable	15 min.	16 hrs.	75D	N/A	23.9	N/A	N/A	Beige
EPSILON® w/ 102 Med	100A:25B pbw	Variable	30 min.	24 hrs.	75D	N/A	24.3	N/A	N/A	Beige
Free Form® - Air Putty	1A:1B pbv	Dough	Varies	24 hrs.	50D	N/A	61.6	N/A	N/A	Grey
Free Form® - Earth Putty	1A:1B pbv	Putty	Varies	16 hrs.	75D	<0.001	15.0	N/A	N/A	Grey
Free Form® - Sculpt Putty	1A:1B pbv	Putty	Varies	overnight	80D	<0.001	20.73	N/A	N/A	Grey

Learn more at: www.smooth-on.com

Epoxy Adhesives

For High-Performance Bonding

Metalset® A4® is a powerful metal-filled epoxy that bonds to porous or non-porous surfaces and can be applied to vertical surfaces without sagging. Cured epoxy can be machined, sanded, etc. **A4®** has been used for years by all branches of the U.S. Military.



Metalset® A4® specified by all branches of the U.S. military.

Super Instant® Epoxy bonds to metals, wood, glass, masonry and hard plastics in 5 minutes.

Super Instant® Epoxy is also available in 200ml cartridges. See dispensing gun on page 42.

MT-13® is a two-component, premium industrial epoxy for applications requiring maximum holding power and water resistance. **MT-13®** is widely used by the boating industry for assembly and general repair.

EA-40® is a low viscosity epoxy that can be used for assembly and repair applications. Bow makers know **EA-40®** as an easy to use, reliable laminating resin.

PC-3® Black Tabletop Cement is a general purpose epoxy designed to permanently bond and caulk sections of laboratory tabletops.

Assembled lab table bonded with **PC-3®** will provide years of worry-free service.

Sil-Poxy® Silicone Adhesive

Sil-Poxy® is a one-component adhesive made specifically for bonding tin or platinum silicone rubber to silicone rubber and other substrates.

URE-BOND® II Urethane Adhesive

URE-BOND® II is a premium performance urethane adhesive that offers a strong flexible bond between many different surfaces. **URE-BOND® II** is ideal for adhering polyurethane rubber to many types of substrates.



EZ~Spray®

EZ~Spray® Silicone 20 & 22

EZ~Spray® Silicone 20 and 22 are platinum-cure silicones that cure quickly to a soft rubber with high elongation and tear strength. They can be sprayed through the EZ~Spray® Jr. System and other spray systems. They cure with negligible shrinkage to strong, durable mold rubbers good for production casting of polyester, epoxy or urethane resins, gypsum, concrete and other materials.

EZ~Spray® Silicone 20 and 22 are ideal for making fast, reusable vacuum bags for producing composite parts.

Tough Enough & Durable Enough!

1 EZ~Spray® Silicone 20 is sprayed on the tool.

Perfect for Vacuum Bagging & Resin Infusion!

2 The bag is repositioned and resin is drawn in, saturating the glass.

3 The cured bag is removed. Resin gel coat and glass are applied to the tool.

4 EZ-Brush® Vac Bag Brushable Version on page 11

EZ~Spray® Silicone 35

EZ~Spray® Silicone 35 cures in one hour with negligible shrinkage to a durable mold rubber good for production casting resins, foams, plaster and other materials.

Silicone liners made with EZ~Spray® 35 for repairing hundreds of grocery store refrigeration units.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore A)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Tear Strength	Tensile Strength	Elongation at Break %	Color
EZ~Spray® Silicone 20	1A:1B pbv	Sprayable	3 min.	20 min.	20A	<0.001	25.6	90 pli	420 psi	470%	Green
EZ~Spray® Silicone 22	1A:1B pbv	Sprayable	5 min.	45 min.	22A	<0.001	25.6	92 pli	460 psi	450%	Green
EZ~Spray® Silicone 35	1A:1B pbv	Sprayable	1.5 min.	1 hr.	35A	<0.001	24.1	92 pli	490 psi	415%	Purple
EZ~Spray® 45	1A:1B pbv	Sprayable	20 min.	16 hrs.	45A	<0.001	27.0	100 pli	510 psi	375%	Light Blue

EZ~Spray®



EZ~Spray® StyroCoat® Sprayable Plastic Foam Coating

Flame rated EZ~Spray® StyroCoat® plastic is formulated to coat EPS foam economically. Dispensed through Smooth-On's EZ~Spray® Jr. spray system, the plastic cures in about 2 seconds and can be applied to vertical surfaces without running off.

Cured plastic is *lightweight, impact resistant* and can be sanded for priming and painting. StyroCoat® can also be sprayed into a rubber mold to make fast, impact resistant castings.

StyroCoat® plastic is used for theme design/fabrication applications and making movie/theater sets.

StyroCoat® coated foam pieces created for the "Give Kids the World" charity theme park, Kissimmee, FL.

StyroCoat® coated foam sculpture used for a Broadway production of "Dracula."

EZ~Spray® 45 Urethane Rubber, EZ~Spray® Plastic

EZ~Spray® 45 is a polyurethane rubber that can be sprayed for making fast molds of large surface areas. It cures overnight with negligible shrinkage and is suitable for casting a variety of materials.

EZ~Spray® Plastic can be sprayed over a rubber mold to create "mother molds" or support shells with high impact resistance. Cured plastic is lightweight, tough and durable.

EZ~Spray® Plastic sprayed to quickly create a mother mold/support shell.

EZ~Spray® Plastic can also be sprayed into the mold to create the finished piece.

Hyde Park Mouldings sculpted and cast several 7 ft. tall (2.1 m.) concrete fountains.

EZ~Spray® 45 produced a flexible mold in a matter of hours.

Product Name	A:B Mix Ratio	Mixed Viscosity	Pot Life	Demold Time	Hardness (Shore D)	Shrinkage (in./in.)	Volumetric Yield (cu. in./lb.)	Ultimate Tensile	Elongation at Break %	Color
StyroCoat® Plastic	1A:1B pbv	Variable	2 sec.	60 min.	80D	0.015	24.7	3,170 psi	20%	Off-White
EZ~Spray® Plastic	1A:1B pbv	Variable	2 sec.	3 hrs.	75D	0.016	25.0	2,650 psi	10%	Off-White

FORTON

FMG Casting System

Flame Rated
ASTM E-84

Forton® VF-812 is a specially formulated, all acrylic co-polymer which cross-links with a dry melamine resin to make the Forton® MG moisture resistant and UV stable. FMG® is a unique combination of high-strength alpha hemi-hydrate gypsum with water based polymer chemistry that is reinforced with "E" glass fiber. FMG® is the first technology to make gypsum an exterior product, when painted or sealed, and is certified as meeting the **ASTM E-84, Class A (or 1)** flame rating for building materials.

Forton® MG together with metal powders and other fillers simulate the look of metal, stone and other finishes.

duoMatrix®-G

duoMatrix®-G is a polymer additive system for alpha gypsums that greatly enhances physical and performance properties. Castings are stronger, lighter, weather resistant and can be demolded four times faster. Its versatility allows adding of metal powders and other fillers to simulate the look of metal, stone and other facades. duoMatrix®-G can also be pigmented and painted.

duoMatrix® is combined with bronze powder to create the look of real metal.



duoMatrix® is strong and lightweight.

duoMatrix® NEO®

An easy-to-use version of duoMatrix®-G, NEO's dry components (PART A) are "pre-measured" for easy measuring and mixing with PART B - latex liquid. Easy two-to-one by volume mix ratio means no scale is required. NEO® can be used to make lightweight pieces that are very strong and water-resistant. NEO® is also flame resistant; meeting the **ASTM E-84, Class A (or 1)** flame rating for building materials.

Sculptor Clay Williams uses Forton® MG and aluminum powder to quickly make lightweight, durable castings.



Flame Rated
ASTM E-84

duoMatrix® castings are weather resistant and durable.



Learn more at: www.smooth-on.com

FORTON

VF-774 Additive For GFRC

Forton® VF-774 is an all acrylic thermoplastic co-polymer emulsion that significantly improves long-term physical properties of glass fiber reinforced concrete (GFRC) and Complies with PCI plant certification program specification Appendix L. Forton® VF-774 also eliminates the 7-day wet cure required to achieve the maximum strengths of the GFRC matrix at 28 days.

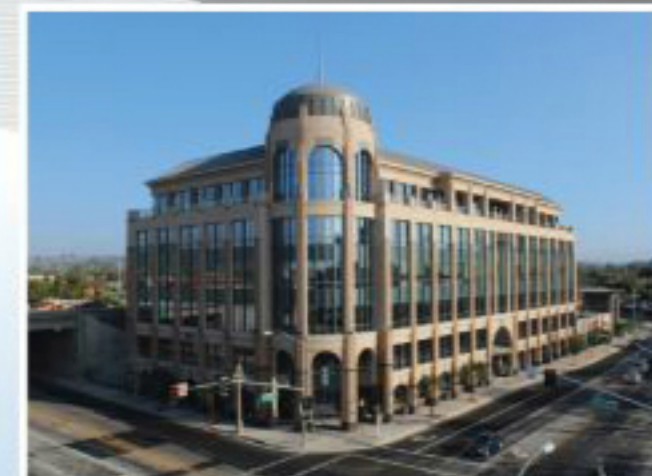
Additional Benefits of Forton® VF-774 include:

- Reduces crazing and drying shrinkage cracks
- Improved workability of the mix at low water/cement ratios
- Reduces moisture absorption
- UV stable
- Uniform distribution of pigments for batch to batch color consistency.

Flame Rated
ASTM E-84



Forton® Enhanced GFRC offers faster turnaround, lower labor costs and endless design possibilities.



Forton® VF-774 enhanced architectural elements created by Willis Construction for the Citrus Tower Corporate Plaza in Riverside, California.



PCI
CERTIFIED &
SUPPORTED
WITH 20
YEARS OF
TEST DATA

duoMatrix®-C

duoMatrix®-C is a polymer additive for concrete that greatly enhances physical and performance characteristics. duoMatrix®-C greatly reduces water/salt absorption and virtually eliminates microcracks. Freeze/thaw, chemical and UV resistance are also enhanced, and duoMatrix®-C also eliminates the usual 7-day post cure.



duoMatrix®-C produces architectural items that stand up to the most extreme environmental conditions.

Learn more at: www.smooth-on.com

Sealers and Release Agents

Sealers

SuperSeal® Liquid Sealer	Economical, low viscosity, fast-drying sealing agent for a variety of surfaces that can be easily washed off.
Sonite® Wax	Soft paste wax used to seal highly porous surfaces such as concrete. Will aid in releasing mold rubber from a variety of surfaces.
Ease Release® 2831	Liquid wax designed to seal with minimal wax build-up.
One Step®	Convenient, economical liquid that seals porous surfaces and releases urethane rubber in a single step.

Release Agents



Mann
Release Technologies

Mann Release Technologies release agents cover many applications. Aerosol and Non-Aerosol, Solvent Based or Water Based; made especially for mold making and casting.

IN & OUT® II Concrete Release Agent



IN & OUT® II water soluble release agent used for releasing concrete from rubber molds. IN & OUT® II provides a clean, positive release which does not interfere with surface detail or colored concrete.

Kwik® II Sprayer

An economical alternative to aerosols for dispensing liquid release agents and sealing agents, the Kwik® II Sprayer delivers sealing agent or release agent in a fine mist.

Mold Making & Casting Equipment

Vacuum Chambers are used for removing air from high viscosity materials like silicone rubber before pouring. They are also ideal for vacuum degassing liquid plastics such as Crystal Clear® plastic for making bubble free castings. The vacuum chamber is made from tough aluminum and the lid is made from shatter resistant acrylic. It can accommodate up to a 5 gallon pail. Vacuum pump not included.



Pressure Chambers are used for pressure casting liquid rubber and liquid plastics. Pressure casting resins is optimal for creating castings that are truly bubble free. Recommended pressure for pressure casting is 60 psi. Maximum pressure is 80 psi. Compressor not included.

EZ~Spray® Jr. Gun is a versatile, convenient and easy-to-use spray system for spraying 1,500 ml cartridges of EZ~Spray® mold making and casting materials for large projects. Additional static mixers are available. Compressor not included.



The 400 ml Dispensing Gun is available in both a manual and electric version. They both force parts A & B through a static mixing tube by squeezing the handle of the manual gun or pulling the trigger on the electric gun. The electric gun is excellent for frequent molders and larger projects. Mold Star® 16 FAST, Body Double®, Dragon Skin®, Ecoflex® are available, and other 400 ml cartridges can be used.

The 200 ml Dispensing Gun is available in a manual version only. Super Instant® Epoxy, and other 200 ml cartridges can be used.



Turbine Mixer has a simple design, yet does a better job of mixing rubbers, plastics, and foams than any mixer we've tried. It also mixes powder-based Alja-Safe® alginate and Matrix NEO® with fiber better, and is easy to clean.

EpoxAmite® Dispensing Pumps

are calibrated to deliver the correct amount of Part A resin and Part B hardener with a single push. One Push 'A' + One Push 'B' = Correct Amount of product to mix - no need to weigh the components.



Reike Spout Valve Adapter Kit

is designed to fit snugly inside the Reike brand pour spout which comes equipped with all 5 gallon buckets of Smooth-On material. The kit permits the pail to be stored on its side for more accurate and convenient pouring.



Mixing Containers with graduated markings. Available in 16 oz., 32 oz., 64 oz., and 165 oz. sizes. Packaged in cases of 10, 50 or 100 containers.

Equipment



An Important Material Resource: smooth-on.com

Instructional Video Gallery

We have over **60 videos** on YouTube that take you through a variety of topics ranging from general mold making techniques to specific application instruction. Learn a lot in a short period of time by viewing our "Mold Making Minute™", "Casting Quickies™" & "Makeup Effects Minute™" videos.



VISIT
smooth-on.com/faq
for FAQ's!

Frequently Asked Questions

Benefit from the experience of others! Our archive contains over 50 years of accumulated information associated with mold making and casting. These FAQ's can help you avoid costly mistakes or solve puzzling problems.



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Mold Making



Casting



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