

# PRODUCT CATALOG

# What Are You Waiting For? Make thow

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.



Smooth-On's new 380,000 ft<sup>2</sup> (35,303 m<sup>2</sup>) facility in Macungie, PA makes hundreds of materials that ship around the world.



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

# Hands-On Training...

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.



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.

#### Find Material Answers for Your Project...

Thousands of people visit **smooth-on.com** everyday to view our videos and "how to" galleries. Step-by-step instruction will help you understand how these materials can work for your project.

## 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



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#### Tin-Cure Silicone Rubber

# Mold Max<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> silicones will last for years in your mold library.

> Mold Max<sup>®</sup> 14 NV has a high tear strength and does not require vacuum degassing. Liquid rubber pours easily and flows well over any surface.

**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.

Precise detail reproduction . . . Mold Max<sup>®</sup> silicones capture detail down to a fingerprint.



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

# Mold Max<sup>®</sup> Series Tin-Cure Silicone Rubber



**Mold Max® STROKE®** is convenient and cost effective. It self thickens and holds a vertical surface for making detailed brush-on molds. Mold Max<sup>®</sup> 60 features high heat resistance for casting metal alloys such as tin, pewter, etc. - up to 560°F / 294°C.

МІХ

POUR

DEMOLD

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

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

Product Name	1. 4 A.	1 21 25	<b>20</b>		/ 2 5	1 2 3	· / 52 50 (	2/ 28 45	1 49 7	ଁ ଓ
Mold Max <sup>®</sup> 10	100A:10B pbw	15,000 cps	45 min.	24 hrs.	10A	.001	24.1	100 pli	529%	Light Pink
Mold Max <sup>®</sup> 14 NV	100A:10B pbw	7,500 cps	45 min.	4 hrs.	15A	.002	24.7	87 pli	600%	White
Mold Max <sup>®</sup> 20	100A:10B pbw	25,000 cps	45 min.	24 hrs.	20A	.001	23.5	110 pli	512%	Light Pink
Mold Max <sup>®</sup> 25	100A:5B pbw	25,000 cps	60 min.	24 hrs.	25A	.001	23.5	130 pli	375%	Purple
Mold Max <sup>®</sup> 30	100A:10B pbw	25,000 cps	45 min.	24 hrs.	30A	.002	23.5	125 pli	300%	Pink
Mold Max <sup>®</sup> 40	100A:10B pbw	45,000 cps	45 min.	24 hrs.	40A	.004	24.3	120 pli	250%	Mint Green
Mold Max <sup>®</sup> 60	100A:3B pbw	20,000 cps	40 min.	24 hrs.	60A	.0015	19.1	63 pli	132%	Red
Mold Max <sup>®</sup> XLS <sup>®</sup> II	100A:10B pbw	30,000 cps	40 min.	24 hrs.	30A	.001	22.7	110 pli	375%	Blue
Mold Max <sup>®</sup> STROKE <sup>®</sup>	100A:10B pbw	Brushable	20 min.	16 hrs.	30A	.002	23.5	125 pli	300%	White

#### Learn more at: www.smooth-on.com

sit.o

### **Tin-Cure Silicone Rubber**

# Mold Max<sup>®</sup> T Series Transfucent 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<sup>®</sup> 'T' translucent rubbers are ideal for creating animatronic skins and special effects using Silc Pig<sup>®</sup> silicone pigments.

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

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

> > > OOM



# OOMOO<sup>®</sup> Silicones ... It doesn't get any easier!

Perfect for beginners, hobbyists and craft makers, OOMOO<sup>®</sup> 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<sup>®</sup> molds are good for fast prototyping and model

OOMOO® 3

making, creating resin jewelry and home hobby projects.

> Custom kit car lenses cast from an OOMOO<sup>®</sup> 30 two-piece mold.

custom candles as seen on "" "The Martha Stewart Show"

OOMOO<sup>®</sup> 30 used to mold

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Mold Max <sup>®</sup> 10T	100A:10B pbw	14,000 cps	45 min.	24 hrs.	10A	.0025	25.4	87 pli	586%	Translucent
Mold Max <sup>®</sup> 15T	100A:10B pbw	20,000 cps	45 min.	24 hrs.	15A	.002	25.6	94 pli	600%	Translucent
Mold Max <sup>®</sup> 27T	100A:10B pbw	30,000 cps	45 min.	24 hrs.	27A	.002	25.0	110 pli	400%	Translucent
OOMOO <sup>®</sup> 25	1A:1B pbv	4,250 cps	15 min.	75 min.	25A	.0025	20.6	40 pli	250%	Light Blue
OOMOO <sup>®</sup> 30	1A:1B pbv	4,250 cps	30 min.	6 hrs.	30A	.0025	20.6	40 pli	250%	Lavender

# **Mold Star®** Series 1A:1BMix By Volume, Low Viscosity Silicones

Mold Star® 15, 16, 20T, and 30 silicones are easy-to-use and feature relatively low viscosity meaning vacuum degassing is not required. Mold Star<sup>®</sup> cures to a strong, resin resistant rubber that has good tear resistance and exhibits very low long-term shrinkage. Molds made with Mold Star<sup>®</sup> silicones will last a long time in your mold library and are good for casting wax, gypsum, resins, and other materials.

> Mold Star<sup>®</sup> 20T is translucent, and offers a great fast-curing soft silicone option.

Mold Star<sup>®</sup> 16 FAST is also available in 400 ml cartridges. See dispensing guns on page 46.

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# **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<sup>®</sup> 25 molds were used to reproduce a giant tree root, creating a unique poolside table at a tropical resort.



			/ 1	
Mold Star <sup>®</sup> 15 <sup>*</sup> SLOW	1A:1B pbv	12,500 cps	50 min.	
Mold Star <sup>®</sup> 16 <sup>°</sup> FAST	1A:1B pbv	12,500 cps	6 min.	3

1	Mold Star <sup>®</sup> 15 <sup>*</sup> SLOW	1A:1B pbv	12,500 cps	50 min.	4 hrs.	15A	< 0.001	23.5	88 pli	440%	Green
	Mold Star® 16 <sup>*</sup> FAST	1A:1B pbv	12,500 cps	6 min.	30 min.	16A	<0.001	23.5	88 pli	440%	Blue-Green
	Mold Star <sup>®</sup> 20T <sup>*</sup>	1A:1B pbv	11,000 cps	6 min.	30 min.	20A	<0.001	25.6	90 pli	470%	Translucent
	Mold Star <sup>®</sup> 30 <sup>*</sup>	1A:1B pbv	12,500 cps	45 min.	6 hrs.	30A	<0.001	24.7	88 pli	339%	Blue
	Rebound <sup>®</sup> 25 <sup>*</sup>	1A:1B pbv	Brushable	20 min.	6 hrs.	25A	< 0.001	23.5	102 pli	690%	Orange
	Rebound <sup>®</sup> 40 <sup>*</sup>	1A:1B pbv	Brushable	20 min.	6 hrs.	40A	<0.001	23.5	106 pli	324%	Green



FOOD

SAFE

# Smooth-Sil® Series Archival, Minimum Long-Term Shrinkage

**Smooth-Sil**<sup>®</sup> 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**<sup>®</sup> without application of release agent.

#### Smooth-Sil® 935 is the

perfect choice for creating GFRC architectural elements. It is both chemically and abrasion resistant. Iy no shrinkage, Smooth-Sil® 935 molds

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® 940** meets FDA compliance<sup>\*</sup> 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. 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.

## SORTA-Clear<sup>®</sup> Series Translucent Silicone Rubber

**SORTA-Clear**<sup>®</sup> **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**<sup>®</sup> rubber is ideal for making prototype, jewelry or other molds of any configuration where model visibility is important. **SORTA-Clear**<sup>®</sup> **18, 37 and 40** are also food safe<sup>\*</sup> and used to make custom chocolates, candy, cakes and more.

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Product Name	A:8 Mix Patio		20	/ 3ª	Show Con		Specific Specific Columne		101 101 101 101	e oo
Smooth-Sil <sup>®</sup> 935	100A:10B pbw	40,000 cps	45 min.	24 hrs.	35A	< 0.001	23.5	115 pli	300%	Blue
Smooth-Sil <sup>®</sup> 940	100A:10B pbw	35,000 cps	30 min.	24 hrs.	40A	<0.001	23.4	100 pli	300%	Pink
Smooth-Sil <sup>®</sup> 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 <sup>®</sup> 18	100A:10B pbw	21,000 cps	60 min.	24 hrs.	18A	< 0.001	25.6	80 pli	545%	Translucent
SORTA-Clear <sup>®</sup> 37	1A:1B pbv	35,000 cps	25 min.	4 hrs.	37A	<0.001	25.6	105 pli	400%	Translucent
SORTA-Clear <sup>®</sup> 40	100A:10B pbw	35,000 cps	60 min.	16 hrs.	40A	<0.001	27.8	120 pli	400%	Translucent

\* Refer to Technical Bulletin for more details

Learn more at: www.smooth-on.com

7

# Dragon Skin<sup>®</sup> Series Soft, Strong, Hexible, Stretchy...Incredible!

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

Dragon Skin<sup>®</sup> 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<sup>®</sup> silicones are used extensively for coating fabric, shock absorption and other industrial applications.

Certified

Skin Safe!

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

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





Skin Tite<sup>®</sup> 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<sup>®</sup> 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.

#### Skin Safe!

Skin Safe!		Miles Listed	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	000	Hardness Shohess	intege		Street II.	Elongation	No and A
Product Name	A:BM Ratio	A SS SS	20	Cemolo Unit	1 4 5 S		Socific In		at B	e do do
Dragon Skin <sup>®</sup> 10 Slow	1A:1B pbv	23,000 cps	45 min.	7 hrs.	10A	< 0.001	25.8	102 pli	1,000%	Translucent
Dragon Skin <sup>®</sup> 10 Medium	1A:1B pbv	23,000 cps	20 min.	5 hrs.	10A	<0.001	25.8	102 pli	1,000%	Translucent
Dragon Skin <sup>®</sup> 10 Fast	1A:1B pbv	23,000 cps	8 min.	75 min.	10A	< 0.001	25.8	102 pli	1,000%	Translucent
Dragon Skin <sup>®</sup> 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 <sup>®</sup> 20	1A:1B pbv	20,000 cps	25 min.	4 hrs.	20A	< 0.001	25.6	120 pli	620%	Translucent
Dragon Skin <sup>®</sup> 30	1A:1B pbv	30,000 cps	45 min.	16 hrs.	30A	<0.001	25.7	108 pli	364%	Translucent
Dragon Skin <sup>®</sup> FX-Pro	1A:1B pbv	18,000 cps	12 min.	40 min.	2A	< 0.001	25.0	61 pli	763%	Translucent

# **Ecoflex®** Series

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

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

Like **Dragon Skin**<sup>®</sup>, these rubbers are easy to use and can be vibrantly colored with **Silc Pig**<sup>®</sup> or **Psycho Paint**<sup>®</sup>. **Ecoflex**<sup>®</sup> 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® 00-30 mask and gloves painted with Psycho Paint® by Composite FX.



Certified Skin Safe!





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

#### 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.

socket liners for prosthetic limbs.

Soma Foama® produces lightweight, flexible castings.

Product Name	\ <del>\</del> <del>\</del> <del>\</del>	1 2 2	/ °	105	~~~~	198	1820	125	14 8	
Ecoflex <sup>®</sup> Gel	1A:1B pbv	9,300 cps	15 min.	2 hrs.	000-35	<0.001	28.0	N/A	1000%	Translucent
Ecoflex <sup>®</sup> 00-10	1A:1B pbv	14,000 cps	30 min.	4 hrs.	00-10	< 0.001	26.6	22 pli	800%	Translucent
Ecoflex <sup>®</sup> 00-20	1A:1B pbv	3,000 cps	30 min.	4 hrs.	00-20	<0.001	26.0	30 pli	845%	Translucent
Ecoflex <sup>®</sup> 00-30	1A:1B pbv	3,000 cps	45 min.	4 hrs.	00-30	< 0.001	26.0	38 pli	900%	Translucent
Ecoflex <sup>®</sup> 00-35 Fast	1A:1B pbv	3,500 cps	2.5 min.	5 min.	00-35	<0.001	26.0	38 pli	900%	Off White Translucent
Ecoflex <sup>®</sup> 00-50	1A:1B pbv	8,000 cps	18 min.	3 hrs.	00-50	< 0.001	25.9	50 pli	980%	Translucent
Ecoflex <sup>®</sup> 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 <sup>®</sup> 15	2A:1B pbv	10,000 cps	30 sec.	1 hr.	N/A	N/A	115	N/A	N/A	Off-White
Soma Foama <sup>®</sup> 25	1A:1B pbv	25,000 cps	90 sec.	2 hr.	N/A	N/A	64	N/A	N/A	Off-White

Line A

#### Specialty Silicone

# Special Effects, Encapsulation

**Rubber Glass**<sup>®</sup> 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<sup>®</sup> or Ignite<sup>®</sup> color pigments. Rubber Glass<sup>®</sup> is used to create a variety of special effects and model effects.

# lee 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.

# Encepsulate 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!

# Solaris® Clear Silicone Encapsulant

Solaris<sup>®</sup> 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<sup>®</sup> makes it suitable for potting solar cells for maximum light transmission or electronic assemblies where component identification is necessary.

Product Name	/ ኛ 🖑	1 2 2	/ %	/	/ २ ४	/ रे 🛎	/ & & &	1 2 5	1 2 2	/ ଓ
Rubber Glass®	1A:1B pbv	150 cps	120 min.	16 hrs.	33A	<0.001	28.6	N/A	N/A	Clear
Encapso <sup>®</sup> K	1A:1B pbv	150 cps	120 min.	16 hrs.	33A	<0.001	28.6	N/A	N/A	Water Clear
Solaris <sup>®</sup> Clear Encapsulant	1A:1B pbv	1,200 cps	4 hrs.	24 hrs.	15A	<0.001	28.1	NA	290%	Clear

### **Specialty Silicone**

# Specialty Silicone 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.



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

# **Equinox® Silicone Putty**

**Equinox**<sup>®</sup> **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**<sup>®</sup> rubbers are also food safe<sup>\*</sup> and used to make custom chocolates, candy, cakes and more.

Boat Production in Overdrive Finished parts are delivered in a fraction of the time using Vac Bag Silicone vs.

conventional bagging materials.



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

#### 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.

					/ ` `	/				
EZ~Brush <sup>®</sup> Vac Bag Silicone	1A:1B pbv	Brushable	30 min.	3.5 hrs.	20A	< 0.001	25.7	120 pli	364%	Translucent Green
Equinox <sup>®</sup> 35 Fast	1A:1B pbv	Putty	1 min.	7 min.	35A	0.0003	21.3	140 pli	430%	Light Purple
Equinox <sup>®</sup> 38 Medium	1A:1B pbv	Putty	4 min.	10 min.	38A	0.0003	21.3	140 pli	430%	Light Purple
Equinox <sup>®</sup> 40 Slow	1A:1B pbv	Putty	30 min.	5 hrs.	40A	0.0003	21.3	140 pli	430%	Light Purple
Poyo <sup>®</sup> Putty 40	20A:1B pbv	Putty	5 min.	20 min.	40A	0.003	21.25	85 pli	250%	Light Pink

**11** \* Refer to Technical Bulletin for more details

Product Nar

## Lifecasting Materials

Apply

Easily

From

Releases

**Body Hair** 

**Body Double® Silicone** Certified

Body Double® Fast Set and Standard Set Skin Safe! have become Hollywood favorites for capturing and reproducing faces, hands, and other body parts. New Body Double Silk<sup>®</sup> releases from hair covered body surfaces without a release agent. Skin Safe Silk<sup>®</sup> 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<sup>®</sup> NEO<sup>®</sup>, wax, resins (Smooth-Cast<sup>®</sup> urethanes, polyester, etc.), low-temperature melt metal alloys, etc.

Body Double<sup>®</sup> silicone can capture details down to a fingerprint. **Body Double Silk®** easily releases from beards and other body hair.

#### Alja-Safe®& Acrobat® **Powder Alginates Crystalline-Silica Free**

Alja-Safe<sup>®</sup> 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<sup>®</sup> MG

**Complete**<sup>°</sup> (polymer modified gypsum), platinum-cure silicone, or Smooth-Cast° **300Q** urethane resin into the mold to make a reproduction. and holds a vertical surface -

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

#### **Patent Pending** Alja-Safe<sup>®</sup> Breeze<sup>®</sup> **Liquid Alginate Crystalline-Silica Free**

Perfect

Copy!

No powder - no dust! Alja-Safe<sup>®</sup> **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 singleuse pourable molds of hands, feet and other body parts. It captures excellent detail, giving you an accurate reproduction of your original.

#### Alja Safe<sup>®</sup> Liquid Breeze

offers significantly less bubble entrapment vs. powder alginates and is virtually bubble free.

Product Name	A :8		/ 2 <sup>0°</sup>		£ 5	1 2 5	/ \$ 5 5	1 2 5	/ 22 %	ଁ ଓ
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 <sup>®</sup> 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 <sup>®</sup> Breeze <sup>®</sup>	5:1 pbv water:liquid	N/A	5 min.	10 min.	N/A	N/A	26	N/A	N/A	Blue

Acrobat<sup>®</sup> is thicker

great for molds of the face.

# Silicone Accessories

# Silicone Accessories

#### FAST CAT<sup>®</sup> 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**<sup>®</sup> color pigments.

#### SLIDE<sup>®</sup> STD Liquid Surface Tension Diffuser

greatly reduces surface tension when added to platinum cure silicone.

Psycho Paint<sup>®</sup> is a versatile translucent clear paint base, developed to help artisans easily create painted-on color effects for their platinum silicone creations.

#### SKIN TITE®

is a skin safe silicone 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.

#### Skin Safe!

#### **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**<sup>®</sup> silicone foam without affecting the ultimate physical properties.

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

**SLACKER®** 



Fast Cat<sup>®</sup> 30 can accelerate Mold Max<sup>®</sup> 30 so that it will cure over frozen models!

#### Silicone Accessories **Silicone Accessories** FOR USE WITH ALL SILICONES Silicone Silc F Pigments are used for coloring all Smooth-On silicones. Create mind blowing skin effects when used with Psycho Paint<sup>®</sup> or Skin Tite<sup>®</sup>. Silc Pig<sup>®</sup> pigments are concentrated, offer excellent dispersion and consistent color. Silc-Pig<sup>®</sup> pigments are mixed with Yellow Red Blue Green Psycho Paint° and applied with an PMS 107C PMS 186C PMS 2757C PMS 3292C airbrush to paint the finishing touches on an **Ecoflex**<sup>®</sup> silicone mask. Blood Flesh Brown Black White PMS 4625C PMS 7421C **PMS 488C** PMS BLACK **PMS WHITE** COLOR SYST Available in a 9-pack Color Sampler SMOOTHON Sile **ALSO AVAILABLE:** Ignite<sup>®</sup> Fluorescent Pigments and Cryptolyte® UV Glow Additive See pages 31 & 33 for details! **NOVOCS**<sup>™</sup> Untreated **Gloss & Matte Silicone Solvents Ecoflex**® 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® Tom Kuebler's "Doctor Cranius" silicone paint base to apply via silicone creation made with Dragon Skin<sup>®</sup> and painted brush or airbrush to cured platinum **Psycho Paint®** with Psycho Paint® thinned silicone rubber props and prosthetics. thinned with with NOVOCS<sup>®</sup> Matte. **NOVOCS®** Gloss. **Psycho Paint®** thinned with **NOVOCS®** Matte. **SILICONE** THINNER®

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

#### THI-VEX<sup>®</sup> 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.

#### SIL-POXY<sup>®</sup> 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<sup>®</sup> can also be used for repairing torn silicone rubber molds.

# 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<sup>®</sup> 40 is used to make a 2-part mold of a concrete sink basin.

CHIEBRATING

RABLE + DEPENDER

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

Product Name	/ ``									
VytaFlex <sup>®</sup> 10	1A:1B pbv	3,100 cps	30 min.	24 hrs.	10A	< 0.001	27.9	38 pli	1,000%	Off-White
VytaFlex <sup>®</sup> 20	1A:1B pbv	1,000 cps	30 min.	16 hrs.	20A	< 0.001	27.7	60 pli	1,000%	Clear Amber
VytaFlex <sup>®</sup> 30	1A:1B pbv	1,800 cps	30 min.	16 hrs.	30A	< 0.001	27.3	78 pli	1,000%	Off-White
VytaFlex <sup>®</sup> 40	1A:1B pbv	2,000 cps	30 min.	16 hrs.	40A	< 0.001	26.9	82 pli	660%	Off-White
VytaFlex <sup>®</sup> 50	1A:1B pbv	2,000 cps	60 min.	16 hrs.	50A	< 0.001	26.7	102 pli	400%	Off-White
VytaFlex <sup>®</sup> 60	1A:1B pbv	2,000 cps	60 min.	16 hrs.	60A	< 0.001	26.6	136 pli	480%	Off-White

# 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**<sup>®</sup> mold rubber picks up all the intricate detail from this wall plaque and ceiling medallion.

**ReoFlex**<sup>®</sup> rubbers are widely used to cast wax for candlemaking. **ReoFlex**<sup>®</sup> realistic frog prop casting is painted using thinned Brush-On<sup>®</sup> 40.

Product Name	7 रें रें	22	<u> </u>		~ * ?	53	1220	2/ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	4 8	
ReoFlex <sup>®</sup> 20	1A:1B pbv	1,800 cps	30 min.	16 hrs.	20A	<.0001	27.3	60 pli	1,000%	Off-White
ReoFlex <sup>®</sup> 30	1A:1B pbv	1,500 cps	30 min.	16 hrs.	30A	<.0001	27.5	82 pli	1,000%	Off-White
ReoFlex <sup>®</sup> 40	1A:1B pbv	1,500 cps	30 min.	16 hrs.	40A	<.0001	27.2	85 pli	1,000%	Off-White
ReoFlex <sup>®</sup> 50	1A:1B pbv	2,000 cps	50 min.	16 hrs.	50A	<.0001	27.4	120 pli	435%	Off-White
ReoFlex <sup>®</sup> 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

Aura Ceramics of Easton, PA used **PMC®-121/50** to create detailed plaster reproductions of tiki dolls.

PMC®-121/50 Large architectural mold.

# **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.





Beeskep II uses PMC<sup>®</sup>- 744 for their candlemaking business. The case molds above are strong, durable and dimensionally stable, yielding predictable results with each use.

5 % /



#### **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.

15 2

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

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Product Name	A:B	- <u>1</u>	<u></u>		/ \$ 5		<u></u>		\$\$ \$\$ \$\$	ଁ
PMC <sup>®</sup> -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 <sup>®</sup> -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

#### Polyurethan

# PMC<sup>®</sup> Series Industrial Rubbers PMC<sup>®</sup>-770, 780 & 790

PMC®-770 rubber mechanical gear.

The **PMC**<sup>®</sup> 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 pullies) and vibration/ shock pads. They are also used as powerful flexible adhesives for industrial bonding applications.



**PMC®-790** was used to create rubber molds for these balusters. The molds have been used for hundreds of concrete castings.







Concrete balusters made from production quality PMC<sup>®</sup>-790 urethane rubber molds.

Econ<sup>®</sup> 60 & 80 are lower cost rubbers compared to our popular PMC<sup>®</sup> Series. They are mixed 1A:1B by volume, possess a relatively low viscosity, no odor, and cure quickly. They do have lower physical properties compared to the PMC<sup>®</sup> Series rubbers as well, but are suitable for many industrial applications, including making highly impact resistant prototype parts, fast concrete stamping pads and fast pour-inplace gaskets for equipment. Econ<sup>®</sup> 80 can also be used as a liner for concrete burial vaults.



**Econ® 60 & 80** are both good choices for making economical concrete stamping pads.

Product Name	A:B Min. Rolint	Million Construction	Corline Corline	Demolo Timolo	Hardness (Sheress	ठँ / ऱ्रिँ 🤇	Volumetric	Grand Carling	Elongari	Color Color
PMC <sup>®</sup> -770	2A:1B pbv	3,000 cps	30 min.	16 hrs.	70A	< 0.001	26.5	200 pli	750%	Light Amber
PMC <sup>®</sup> -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 <sup>®</sup> 60	1A:1B pbv	1,400 cps	6 min.	16 hrs.	60A	< 0.001	26.7	85 pli	500%	Light Amber
Econ <sup>®</sup> 80	1A:1B pbv	1,200 cps	13 min.	6 hrs.	80A	0.0014	26.16	77 pli	127%	Translucent

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. Brush-On<sup>®</sup> Series Ideal for Vertical or Inverted Surfaces

Smooth-On's **Brush-On**<sup>®</sup> 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.

#### Versatile – DID YOU KNOW?

**Brush-On**<sup>®</sup> 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' GFRC dome panels were cast from the molds below.

Adding SO-Strong<sup>®</sup> 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<sup>®</sup>40

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

Product Name	7 4		<u></u>		/ £ 5	- & E		?/ ~° ~~	\$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$1 \$	·/
Brush-On <sup>®</sup> 35	1A:1B pbv	Brushable	20 min.	16 hrs.	35A	<0.001	21.5	57 pli	1,000%	Grey-Green
Brush-On <sup>®</sup> 40	1A:1B pbv	Brushable	20 min.	16 hrs.	40A	< 0.001	23.7	60 pli	1,000%	Off-White
Brush-On <sup>®</sup> 50	1A:1B pbv	Brushable	20 min.	16 hrs.	50A	<0.001	23.7	80 pli	400%	Off-White
Brush-On <sup>®</sup> 60	1A:1B pbv	Brushable	20 min.	16 hrs.	60A	<0.001	23.7	80 pli	400%	Off-White
EZ-Mix <sup>®</sup> 40	1A:1B pbv	Brushable	18 min.	16 hrs.	40A	<0.001	27.0	67 pli	577%	Grey

# Clear Flex Series Optically Clear, Hexible and UV Resistant

**Clear Flex**<sup>®</sup> are tough rubbers that are water white 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<sup>®</sup> 50

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

Product Name	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	25	/ °	/ 3 <sup>Z</sup>	/ ギ シ	<i>\$</i> .\$	<u>  2° 2° C</u>	2 2 5	1 4 6	6
Clear Flex <sup>®</sup> 30	1A:1B pbv	750 cps	15 min.	16 hrs.	30A	.002	26.9	54 pli	675%	Clear
Clear Flex <sup>®</sup> 50	1A:2B pbw	250 cps	25 min.	24 hrs.	50A	.0015	27.7	25 pli	500%	Clear
Clear Flex <sup>®</sup> 95	1A:1.5B pbw	250 cps	25 min.	24 hrs.	95A	.0028	27.2	200 pli	175%	Clear

See 20

#### FMC<sup>®</sup> Polysulfide Time Tested FMC Polysulfide

Used by artists and industry for over 60 years, **FMC**<sup>®</sup> 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**<sup>®</sup> 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		/			/	/	/	/	<u> </u>	/	
FMC <sup>®</sup> 200	100A:12B pbw	6,000 cps	50 min.	16 hrs.	20A	<.0001	20.5	31 pli	700%	Black	Y
FMC <sup>®</sup> 201	100A:12B pbw	6,000 cps	50 min.	16 hrs.	15A	<.0001	20.5	30 pli	700%	Black	
FMC <sup>®</sup> 205	100A:12B pbw	6,000 cps	90 min.	16 hrs.	12A	<.0001	20.1	27 pli	550%	Black	

# Smooth-Cast<sup>®</sup> Series General Purpose Casting Resins

# Smooth-Cast<sup>®</sup> 300 Series - Bright White

Easy to Paint & Finish 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<sup>®</sup> 320 Series - Off-White

The **Smooth-Cast**<sup>®</sup> **320 Series** liquid plastics are "sister" products to our popular Smooth-Cast<sup>®</sup> 300 Series but cure **off-white**. They are easier to color using **SO-Strong**<sup>®</sup>,

UVO<sup>®</sup> or Ignite<sup>®</sup> colorants.

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<sup>®</sup> 320 Puma Skull

	×.	Lined Line	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Demold	Hardhess	Shintege		Luting	Elongatio	vest %
Product Name	A:BMI, Ratio	Mileson Mileson	and so start	Line Com	1 an 1		2 2 3	Chimen Chime	101 a	
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 <sup>®</sup> 321	1:1 pbv	80 cps	7-9 min.	30 min.	70D	0.007	26.4	3,000 psi	8%	Off-White
Smooth-Cast <sup>®</sup> 322	1:1 pbv	80 cps	10-20 min.	2-4 hrs.	70D	0.007	26.4	3,000 psi	8%	Off-White

# **Smooth-Cast**<sup>®</sup> Series General Purpose Casting Resins

## Smooth-Cast<sup>®</sup> 325 ColorMatch Series

Cold Cast Metal Ere Smooth-Cast<sup>®</sup> ColorMatch<sup>®</sup> 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**<sup>®</sup>, **UVO**<sup>®</sup> or **Ignite**<sup>®</sup> colorants 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.

#### Smooth-Cast<sup>®</sup> ONYX<sup>®</sup> - Deep Black

EASIEST TO COLOR

**Smooth-Cast ONYX**<sup>®</sup> is a mercury-free urethane resin that cures guickly 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

Deep

Black

Color

quickly, it is also great for doing fast cold cast bronze, brass, copper, nickel/ silver and other metals.

<sup>Voo</sup>dgrain Effect

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

Cold Cast Marble Effect

Aluminum

Bronze

Brass

Copper

Nickel/Silve

Product Name	\ <del>\</del> <del>\</del> <del>\</del>	1 2 2	/ <del>«</del>	/ <u> </u>	/ ~ <	1 5 6	1826	1 3 ~	4 8	
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 <sup>®</sup> 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 <sup>®</sup> ONYX <sup>®</sup> FAST	1:1 pbv	100 cps	2.5 min.	10-15 min.	80D	0.01	27.7	5,840 psi	4%	Black
Smooth-Cast <sup>®</sup> ONYX <sup>®</sup> 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

**Fast Cure** 

# Smooth-Cast Series General Purpose Casting Resins

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

# Smooth-Cast Semi-Rigid Resins

Smooth-Cast<sup>®</sup> 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**<sup>®</sup>, **UVO**<sup>®</sup> or **Ignite**<sup>®</sup> colorants.

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® 60D can really take a beating!

#### Smooth-Cast<sup>®</sup> 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



Smooth-Cast <sup>®</sup> 45D	1:1 pbv	250 cps	5 min.	30 min.	45D	0.007	25.2	1,560 psi	100%	Transl. White
Smooth-Cast <sup>®</sup> 60D	1:1 pbv	430 cps	5 min.	30 min.	60D	0.0125	26.4	2,420 psi	100%	Transl. White
Smooth-Cast <sup>®</sup> 61D	1:1 pbv	430 cps	7 min.	60 min.	61D	0.0125	26.4	2,420 psi	100%	Transl. White
Smooth-Cast <sup>®</sup> 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

# **Smooth-Cast**<sup>®</sup> Series General Purpose Casting Resins

Smooth-Cast<sup>®</sup> 380 tool used to cast a black electronics utility housing.

## Smooth-Cast<sup>®</sup> Tooling Resins

Smooth-Cast<sup>®</sup> 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

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

Rigid Smooth-Cast<sup>®</sup> 385 **Propeller Model** 

for making industrial parts,

foundry patterns, vacuum forming molds, and some ceramic applications.

## Feather Lite<sup>®</sup> - It Floats In Water!

Feather Lite<sup>®</sup> 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<sup>®</sup> color tints and finished castings can be painted. Feather Lite<sup>®</sup> yields more plastic per pound/kg. than other resins, lowering the cost per casting.

Feather Lite® ventriloquist puppets are easy to handle.

> **Product Name** Smooth-Cast<sup>®</sup> 380

> Smooth-Cast® 385

Feather Lite®

Feather Lite® fishing lures that float!

6 min.

20 min.

8.5 min.

60 min.

2 hrs.

2 hrs.

82D

85D

58D

0.0025

0.0006

0.003

15.9

17.3

41.3

3,550 psi

3,100 psi

2,160 psi

1.43%

1%

1.6%

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

ې

Tan

Beige

Beige

Learn more at:	www.smooth-on.com
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1:1 pbv

1:5 pbw

1:1 pbv

1,140 cps

3,000 cps

410 cps



**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**<sup>®</sup> **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<sup>®</sup> 9 ColorMatch resin is pigmented to create color-coded paper spool caps for a Manhattan print house.

**TASK® 2** was used to create prototype oversized remote controls used for consumer testing prior to final production.

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

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

Product Name	7 4.4	1 2 2 2	20 <sup>0</sup>		1 2 5	1 2 5	1 2 2 3		/ <sup>20</sup> 7	ଁ ଚି
TASK <sup>®</sup> 2	1:1 pbv	150 cps	7 min.	60 min.	80D	0.005	24.7	6,650 psi	6%	White
TASK <sup>®</sup> 3	1:1 pbv	150 cps	20 min.	90 min.	80D	0.0025	24.7	6,650 psi	6%	White
TASK <sup>®</sup> 4	100:100 pbw	250 cps	20 min.	16 hrs.	83D	0.0035	23.9	6,500 psi	4%	lvory
TASK <sup>®</sup> 5	1:1 pbv	600 cps	3 min.	15 min.	77D	0.007	25.2	4,530 psi	5%	Tan
TASK <sup>®</sup> 6	1:1 pbv	800 cps	7 min.	75 min.	75D	0.0031	25.9	5,200 psi	4%	Tan
TASK <sup>®</sup> 7	1:1 pbv	200 cps	2.5 min.	10 min.	73D	0.0111	23.1	3,390 psi	15.1%	White
TASK <sup>®</sup> 8	1:1 pbv	100 cps	2.5 min.	10-15 min.	80D	0.01	25.4	5,840 psi	4%	Off-White
TASK <sup>®</sup> 9	1:1 pbv	300 cps	7 min.	60 min.	85D	0.009	24.3	7,800 psi	6%	Clear Amber

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# TASK<sup>®</sup> Series High-Performance Casting Resins

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

**TASK**<sup>®</sup> **16** - Fast-setting Shore 80A/30D industrial urethane that offers very high tear strength, impact resistance and wear resistance. **TASK**<sup>®</sup> **16** 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<sup>®</sup> 16 is quick setting, easily pigmented and can be used to cast parts, props, etc. that are flexible and highly impact resistant.

#### **Polyurethane Plastic**

#### TASK<sup>®</sup> 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<sup>®</sup> 13 used for the controller housing for the Laser Rack<sup>tm</sup> 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.

Pressure resistant and shark proof TASK<sup>®</sup> 11 used to house deep ocean signal transponders for US Navy.



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



Product Name	4.4	1 2 2	/ °	/	1 2 5	5 - 5	1820	1 5 2	14 6	/ °
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 <sup>®</sup> 13 (C-1515)	100:120 pbw	800 cps	3 min.	20 min.	95A, 50D	0.005	24.1	1,800 psi	125%	Black
TASK <sup>®</sup> 14 (C-1520)	100:120 pbw	800 cps	10 min.	45 min.	95A, 50D	0.0035	24.1	1,800 psi	125%	Black
TASK <sup>®</sup> 15	75:100 pbw	600 cps	6 min.	60 min.	75D	0.0042	24.7	2,720 psi	20%	Opaque White
TASK <sup>®</sup> 16	1:2 pbw	1,400 cps	6 min.	90 min.	80A, 30D	0.0025	25.6	2,264 psi	233%	Light Yellow
TASK <sup>®</sup> 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 <sup>®</sup> 21	2:1 pbv	500 cps	6 min.	60 min.	75D	0.0058	25.9	5,500 psi	7.5%	White

# **Specialty Plastics**

#### Crystal Clear<sup>®</sup> Series - Water Clear & UV Resistant

Crystal Clear<sup>®</sup> 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<sup>®</sup>, UVO<sup>®</sup> or Ignite<sup>®</sup> colorants.

**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!**<sup>®</sup> **Plastic** is a urethane liquid plastic designed to shatter/crumble on impact ("breakaway glass"). **SMASH!**<sup>®</sup> 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"

Mash Plastic

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Product Name	4:8 Mi Rotio	Wited Lisco	Portis	Demold	Hardhese (She	Shinkege	Contraction of the second	Luinde	Elongatic	Color Street
Crystal Clear <sup>®</sup> 200	100:90 pbw	600 cps	20 min.	16 hrs.	80D	0.001	26.7	2,500 psi	10%	Clear
Crystal Clear <sup>®</sup> 202	100:90 pbw	600 cps	9 min.	90 min.	80D	0.0125	26.7	3,500 psi	10%	Clear
Crystal Clear <sup>®</sup> 204	100:90 pbw	600 cps	2 hrs.	48 hrs.	80D	0.002	26.7	3,500 psi	10%	Clear
Crystal Clear <sup>®</sup> 206	100:90 pbw	600 cps	4 hrs.	5 days	80D	0.002	26.7	2,500 psi	10%	Clear
Crystal Clear <sup>®</sup> 220	100:75 pbw	675 cps	22 min.	overnight*	85D	0.0173	25.9	8,190 psi	12%	Clear
SMASH! <sup>®</sup> Plastic	1:1 pbv	900 cps	5 min.	90 min.	80D	0.0125	26.7	N/D	N/D	Clear

ion. All rights reserved.

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

Learn more at: www.smooth-on.com

Simply SMASH!"-ing!

# **Specialty Plastics**

## Simpact<sup>®</sup> Tough 60A & 85A Urethane

Simpact<sup>®</sup> 60A & 85A are low odor, fast-setting urethanes that offer very high tear strength, impact resistance and wear resistance. They are phthalate free, mercury free and MOCA free. Cured rubbers have exceptional performance characteristics and dimensional stability. Simpact<sup>®</sup> 60A & 85A can be colored with SO-Strong<sup>®</sup>, UVO<sup>®</sup> or Ignite<sup>®</sup> colorants. They are suitable for making impact resistant

props, prototypes and display pieces.

**Simpact**<sup>®</sup> 60A & 85A are both on the border between being a rubber and a plastic. This attributes to their toughness and durability, and makes them a favorite among aquarium customers.

#### Plasti-Paste® II Trowelable Plastic Paste



**Plasti-Paste**<sup>®</sup> **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.



#### Shell Shock® Brushable Liquid Plastic

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

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.

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**Shell Shock**<sup>®</sup> rigid molds are used to create film-quality silicone masks.

Product Name	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	25	/ <b>२</b> ०	/ \$ <sup>°</sup> !!	/ २ छ	1 & &	1826	5 5 2	1 2 6	୍ ଓ
Simpact <sup>®</sup> 60A	1:1 pbv	1,100 cps	4 min.	2 hrs.	60A	0.007	25.7	990 psi	400%	White
Simpact <sup>®</sup> 85A	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 <sup>®</sup> Fast	1:4 pbv	3,000 cps	3 min	60 min.	85D	0.0006	17.3	3,100 psi	0.4%	Beige
Shell Shock <sup>®</sup> Slow	1:4 pbv	3,000 cps	8 min	5 hrs.	85D	0.0006	17.3	3,100 psi	0.4%	Beige

## **Expanding Foams**

# **FOAM-iT!**<sup>®</sup> 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®, UVO® or Ignite® colorants for a variety of art/craft, industrial or special effects applications.

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



Cast custom block of FOAM-iT<sup>®</sup> 8 is used as a machinable modeling board.

FOAM-iT!® 26 🦳

FOAM-iT!® 15

#### FOAM-iT!® 10

FOAM-iT!® 8

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

FOAM-iT!® 4 BLACK

FOAM-iT!® 4

	A.B.Mix Ratio	<b>Pot Life</b> (Cream Time) (45714,071me)	Handling Tack Free		Specific Volum	tos. (ubic	Kgs. Meter Ubic	Approx. Volumer.	Color Color
FOAM-iT!® 3	1A:1B pbv	1 min.	20 min.	2 hrs.	504	3 lb/ft <sup>3</sup>	48 kg/m <sup>3</sup>	18 times	Beige
FOAM-iT!® 4	1A:1B pbv	1.5 min.	20 min.	2 hrs.	420	4 lb/ft <sup>3</sup>	64 kg/m <sup>3</sup>	14 times	Beige
FOAM-iT!® 4 Black	1A:1B pbv	1.5 min.	20 min.	2 hrs.	420	4 lb/ft <sup>3</sup>	64 kg/m <sup>3</sup>	14 times	Black
FOAM-iT!® 5	1A:1B pbv	1.5 min.	20 min.	2 hrs.	315	5 lb/ft <sup>3</sup>	80 kg/m <sup>3</sup>	10 times	Beige
FOAM-iT!® 8	2A:1B pbw	1.5 min.	20 min.	2 hrs.	194	8 lb/ft <sup>3</sup>	128 kg/m <sup>3</sup>	8 times	Off White
FOAM-iT!® 10	1A:1B pbv	1.5 min.	20 min.	2 hrs.	157	10 lb/ft <sup>3</sup>	160 kg/m <sup>3</sup>	6 times	Beige
FOAM-iT!® 10 SLOW	1A:1B pbv	3.5 min.	1 hr.	4 hrs	157	10 lb/ft <sup>3</sup>	160 kg/m <sup>3</sup>	6 times	Beige
FOAM-iT!® 15	1A:1B pbv	1.5 min.	20 min.	2 hrs.	105	15 lb/ft <sup>3</sup>	240 kg/m <sup>3</sup>	4 times	Beige
FOAM-iT!® 26	1A:1B pbv	1.5 min.	20 min.	2 hrs.	60	26 lb/ft <sup>3</sup>	416 kg/m <sup>3</sup>	2 times	White

FOAM-iT!<sup>®</sup> 5

Learn more at: www.smooth-on.com

FOAM-iT!® 3

#### **Expanding Foams**

# FlexFoam-iT!<sup>®</sup> Series

**FlexFoam-iT!**<sup>®</sup> 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.

1246

Create Incredibly realistic cinder blocks using FlexFoam-iT!® X and SO-Strong<sup>®</sup> tints.

FlexFoam-iT!<sup>®</sup>25

FLAME RATED FlexFoam-iT!® 23 FR

FlexFoam-iT!® 17

FlexFoam-iT!® 14

FlexFoam-iT!<sup>®</sup>X

PILLOW SOFT FlexFoam-iT!® VIII

Flame FlexFoam-iT!® 7 FR

PILLOW SOFT! FlexFoam-iT!® 6

2

FlexFoam-iT!® V

TUFF STUFFI FlexFoam-iT!® IV

FlexFoam-iT!<sup>®</sup> III

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

Need a Silicone Foam? Find Soma Foama® on pg. 9!

	A:B Mix Ratio	Pot Life (Cream Time (STM Doc)	Handlin Tack Fre	Demold	, /ij ij		ية الح	Approx. Volumer Expand	1
Product Name	A:BM Ratio	Pot Li Cream (457140)	land Hand	Perno Time	Specific Volume	Lbs. (Cut	Kgs./Cu	/ 4 <sup>1</sup> 4	
FlexFoam-iT!® III	1A:2B pbv	35 sec.	25 min.	2 hrs.	504	3 lb/ft <sup>3</sup>	48 kg/m <sup>3</sup>	15 times	White
FlexFoam-iT!® IV	80A:100B pbw	30 sec.	45 min.	2 hrs.	420	4 lb/ft <sup>3</sup>	80 kg/m³	13 times	White
FlexFoam-iT!® V	1A:1B pbv	50 sec.	45 min.	2 hrs.	315	5 lb/ft <sup>3</sup>	80 kg/m³	11 times	White
FlexFoam-iT!® 6	1A:1B pbv	35 sec.	60 min.	2 hrs.	280	6 lb/ft <sup>3</sup>	96 kg/m³	10 times	White
FlexFoam-iT! <sup>®</sup> 7 FR	1A:1B pbv	35 sec.	60 min.	2 hrs.	229	7 lb/ft <sup>3</sup>	110 kg/m <sup>3</sup>	8 times	White
FlexFoam-iT!® VIII	1A:2B pbv	35 sec.	25 min.	2 hrs.	194	8 lb/ft <sup>3</sup>	128 kg/m³	8 times	White
FlexFoam-iT!® X	1A:1B pbv	50 sec.	45 min.	2 hrs.	157	10 lb/ft <sup>3</sup>	160 kg/m³	6 times	White
FlexFoam-iT!® 14	1A:2B pbv	60 sec.	45 min.	2 hrs.	114	14 lb/ft <sup>3</sup>	220 kg/m³	4 times	White
FlexFoam-iT!® 17	1A:2B pbv	60 sec.	30 min.	2 hrs.	93	17 lb/ft <sup>3</sup>	270 kg/m <sup>3</sup>	3.5 times	White
FlexFoam-iT! <sup>®</sup> 23 FR	85A:100B pbw	90 sec.	60 min.	2 hrs.	68	23 lb/ft <sup>3</sup>	370 kg/m <sup>3</sup>	2 times	White
ElexFoam-iT!® 25	1A·2B pbw	90 sec	25 min	2 hrs	63	25 lb/ft <sup>3</sup>	$400 \text{ kg/m}^3$	2 times	White

#### **Polyurethane Accessories**



Available in a 9-pack Color Sampler.

## **Polyurethane Accessories**

#### UreCoat<sup>®</sup> Indestructable Urethane Rubber Coating

Bonds to Many Surfaces to Create a Tough, Long Lasting, Flexible Coating! Urethane Rubber • Latex Rubber • Metal • Resins • Foams • Wood • Fabrics etc...

Coating can be colored and fillers can be added for unique painting effects.



**UreCoat**® is a two-component liquid urethane that can be applied in thin layers to surfaces with a brush. A small amount goes a long way. Rubber cures to a strong, tough and flexible coating that will bend and flex with any substrate.

#### 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.

Bronze



#### Cast Magic<sup>®</sup> Powders

Brass

Cast Magic<sup>®</sup> 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.

Nickel/Silver

#### 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

#### **Quarry Tone® Granite FX Filler Powders**

**Quarry Tone**<sup>®</sup> Powders are the fastest way to create realistic granite and stone effects in minutes!







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# **Polyurethane Accessories**

#### **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.

Ure-Fil® 15 added to reduce weight.



**Phosphorescent Powders for Making** "Glow In The Dark" Castings

**Glow Worm**<sup>®</sup> powders can be added to Smooth-On liquid plastics, rubbers and foams to create castings that glow in

> the dark after being charged with light. **Glow Worm®** powders will glow in the dark at least 10 times longer than other glow powders.



to glow bright blue under a focused ultra violet light.

UREFIL

Normal Light

UV (Black) Light

**SUN DEVIL**<sup>®</sup> 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.



Ure-Fil®7

is added

amazing

marble effects.

to resin to produce



#### Skin Effects **Skin FX Kits & Accessories** Certified Skîn Create Realistic On-Skin Effects Quickly & Easily Safe The <sup>#1</sup> Choice of Nedical Simulation & EMS Professionals Around The World Used By Hollywood Pros Ultimate Ultimate Wound Kit **Zombie Kit** llimate Wound ncludes ludes How-To Booklet <sup>&</sup> 300klet & To learn more about creating on-skin To learn more about creating realistic on-skin wounds Zombie effects and to watch video and to watch video tutorials showing the process, tutorials showing the process, please visit www.smooth-on.com/woundkit please visit www.smooth-on.com/zombiekit em III 💩 Thần III 🌢 Golar III Ultimate Blood® Kit The most realistic and versatile liquid blood system available anywhere. It perfectly simulates human blood in how it looks and flows. Ultimate Blood<sup>®</sup> is ideal for creating special effects, medical training and simulation, moulage or any project in need of highest guality theatrical blood. You can also change the viscosity of Ultimate Blood® on the fly, and change color quickly with color additives. CTAINN FELLOW BLUETT RED TIM You have ultimate control with Please visit www.smooth-on.com/bloodkit Ultimate Blood<sup>®</sup>make it thicker, thinner to learn more and change color. about creating realistic blood effects. AKE IT NOW

To learn more about creating skin effects using our materials, visit our ever-expanding Special Effects Makeup Tutorial Playlist: www.smooth-on.com/skinfx

#### Laminating & Surface Coat Epoxies

# EpoxAmite® Series Laminating System

**EpoxAmite**<sup>®</sup> **100** Epoxy Laminating System is an easy-to-use liquid epoxy system formulated for a wide variety of fabrication applications. **EpoxAmite**<sup>®</sup> **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.

"One Push" Dispensing Pumps See Pg. 46 Pump

Mix

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.

Also available:

101 Fast 102 Medium 103 Slow

**EpoxAcoat® RED or GREY** 

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#### Epic<sup>®</sup> Epoxy Thinner

**Epic**<sup>®</sup> Epoxy Thinner is a clear, water-like liquid that will lower the viscosity of Smooth-On casting and laminating epoxies. **Epic**<sup>®</sup> will also aid in reducing bubble entrapment.

**Epic**<sup>•</sup> IS NOT A SOLVENT, is not hazardous and contains no VOC's or phthalates. Solvents that are commonly used to thin epoxies cause shrinkage. **Epic**<sup>®</sup> is 100% reactive fluid, does not evaporate and does not cause shrinkage.



Ultra-tough EpoxAcoat<sup>®</sup> RED tool is ready to make composite parts for motorcycles.

Is a thixotropic epoxy gel coat that is widely used for hand laminating/tooling applications. It is a tough & strong surface coat resin that cures at room temperature and offers exceptional abrasion resistance **EpoxAcoat**<sup>®</sup> 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**<sup>®</sup> Laminating System (used as a backup for making tools, patterns, fixtures, etc.).

**EpoxAmite**<sup>®</sup> WHIII Laminating System

**EpoxAmite**<sup>®</sup> White can not be used with

"One Push" pre-calibrated pumps.

Product Name	A: 4 8: 4	1 in 13	~ °°		12	§/ & &	1/2 20		في الحي	
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
EpoxAmite <sup>®</sup> White 101 Fast	100A:20B pbw	3,400 cps	20 min.	10-15 hrs.	83D	N/A	22.2	5,130 psi	16,290 psi	White
EpoxAmite® White 102 Medium	100A:23B pbw	2,800 cps	62 min.	20-24hrs.	85D	N/A	22.5	5,600 psi	11,960 psi	White
EpoxAcoat <sup>®</sup> RED	100A:15B pbw	Paste	20 min.	16 hrs.	85D	.00015	18.5	26,000 psi	24,000 psi	Red
EpoxAcoat <sup>®</sup> GREY	100A:15B pbw	Paste	20 min.	16 hrs.	85D	.00015	18.5	26,000 psi	24,000 psi	Grey

#### Learn more at: www.smooth-on.com

Lowers the

Viscosity

of **Epoxies** 

Laminating

• Casting

Infusion

for:

Metal and color effects are also easily achieved by adding Cast Magic<sup>®</sup> powders, and So-Strong<sup>®</sup> or UVO<sup>®</sup> pigments.

#### **XTC-3D<sup>®</sup>** High Performance 3D Print Coating

is a protective coating for smoothing and finishing 3D printed parts. Coating self-levels and wets out uniformly without leaving brush strokes. **XTC-3D**<sup>®</sup> cures to a hard, impact resistant coating that can be sanded, primed Laminating & Surface Coat Epoxies

coating that can be sanded, impact resist and painted. It works with PLA, ABS, Laywood, Powder Printed Parts and other rigid media.

**XTC-3D**<sup>®</sup> does not contain VOC's, phthalates or phosphates.

**XTC-3D**<sup>®</sup> fills in striations and eliminates 90% of post finishing work.

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

#### Epsilon<sup>®</sup> 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**<sup>®</sup> wets out uniformly. Only 2 layers minimum are required to build an adequate thickness and provide an impact resistant coating.

#### Tarbender® High Gloss Coating and Encapsulant

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**<sup>®</sup> epoxy cures at room temperature and offers high impact resistance. **Tarbender**<sup>®</sup> is an excellent wood bar top coating and can also be poured over plaster, concrete, foam, fabrics, etc. You can use **Tarbender**<sup>®</sup> 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.

Resistant!

Product Name	<sup>4:8</sup> mir <sup>Ratio</sup>	in the second	orlie	Muntin Marine	Thin Time Toch Silin The VRO	Thin Film	en con con con con con con con con con co	Hardness Shoness	Specific Gevitic Gevitic	Sectific C.C.	or 11/18)
XTC-3D <sup>®</sup>	2A:1B pbv	350 cps	10 min.	20 min.	90 min.	2 hrs.	3.5 hrs.	80D	1.09	25.1	Clear
EPSILON® w/ 101 Fast	100A:20B pbw	Variable	15 min.	45 min.	60 min.	2 hrs.	16 hrs.	75D	1.16	23.9	Beige
EPSILON® w/ 102 Med	100A:25B pbw	Variable	30 min.	120 min.	180 min.	5 hrs.	24 hrs.	75D	1.14	24.3	Beige
<b>Tarbender</b> ®	2A:1B pbv	1100 cps	45 min.	2 hrs.	6 hrs.	8 hrs.	16 hrs.	75D	1.09	25.4	Clear

# **Castable Epoxies**

20 HYDRAULIO

# **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**<sup>®</sup> 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<sup>®</sup> 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. Available in off-white and black.

EpoxAcast<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 655 is used for making vacuum forming dies, injection molds, foundry patterns and tooling fixtures.



EpoxAcast<sup>®</sup> 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.

Resistent

#### EpoxAcast<sup>®</sup> 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<sup>®</sup> or UVO<sup>®</sup> colorants. Also suitable for making clear molds and prototype parts.

EpoxAcast<sup>®</sup> 690 is perfect for resin jewelry craft.

**Optically clear lens for** projector prototype.



		/	/	/		/		/	· · · ·	
EpoxAcast <sup>®</sup> 650 Fast*	100A:12B pbw	7,000 cps	20 min.	1 hr.	93B	.001	18.2	6,000 psi	16,350 psi	Off-White/Black
EpoxAcast <sup>®</sup> 655 Fast*	100A:10B pbw	23,000 cps	30 min.	3 hrs.	90D	.0006	16.7	4,810 psi	12,500 psi	Grey
EpoxAcast <sup>®</sup> 670 HT	100A:16B pbw	6,000 cps	3 hrs.	24 hrs.	90D	.002	20.5	4,500 psi	13,000 psi	Beige
EpoxAcast <sup>®</sup> 690 Clear	100A:30B pbw	200 cps	5 hrs.	24 hrs.	80D	.002	25.0	6,630 psi	9,610 psi	Clear
Values are mass and configuration dependant. *Also compatible with Medium and Slow speed catalyst										

es are mass and configuration dependant.

# **Epoxy Putty**

# Free Form<sup>•</sup>- Coloitet<sup>®</sup> Black & Fire Safe Epoxy Putties

are mix-by-hand putties that are used to create textured or highly detailed display pieces. Both **Habitat**<sup>®</sup> **Epoxy Putties** are solvent-free and contain no VOC's. They cure to a very hard, heat resistant material that is easily painted. **Habitat**<sup>®</sup> **Epoxy Putties** are suitable for interior and exterior use. They are certified 'aquarium safe' and are used by aquariums to create hyper-realistic coral and other aquarium displays. **Habitat**<sup>®</sup> **Epoxy Putties** are also used for general sculpting and theming applications. **Free Form**<sup>®</sup> **Habitat**<sup>®</sup> **Fire Safe** is flame rated (**E84, Class A**).

#### Use with Habitat<sup>®</sup> Folding Powder –

fold powder into epoxy putty to thicken and reduce stickiness; making the epoxy more handle-able. **Free Form® Habitat®** is also an excellent repair cement and bonds permanently to itself, PVC, Plexiglas<sup>\*</sup> (acrylic), wood, many metals, plastics and foams.

Once applied, **Habitat**<sup>®</sup> Epoxy Putty can be stamped with a silicone rubber stamp to create repeating patterns with intricate detail over a large surface area. This 10 ft./3m tree was fabricated with **Habitat**<sup>®</sup> over a foam core by Denny Stanley, Las Vegas Props.

To see a video of the entire process, please visit

www.smooth-on.com/habitattree

Epoxy Put

### Free Form<sup>®</sup> Hobitot<sup>®</sup> Flex Flame Rated Flexible Epoxy Putty

New Free Form Habitat<sup>®</sup> Flex is a semi-rigid version of the very rigid Habitat<sup>®</sup> products and has some flexibility when cured depending on thickness and configuration. This product is certified flame resistant to the highest testing standard **(E84, Class A)** and is the only semi-rigid epoxy of its kind to have this rating.

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APPLY

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#### Free Form<sup>®</sup>- 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**<sup>®</sup> and fiberglass cloth, carbon or other fiber for making lightweight composite parts.

### Free Form<sup>®</sup>- Sculpt<sup>®</sup> 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<sup>®</sup> 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**<sup>®</sup> Epoxy Putty easy.

Product Name	19:4 19:4	1 1 23			/ 2 5		/ \$ \$ 5 E		للحجر کی 🖉	ଁ ଚ
Free Form <sup>®</sup> Habitat <sup>®</sup> Black	1A:1B pbv	Dough	60 min.	16 hrs.	85D	N/A	17.3	N/A	N/A	Black
Free Form <sup>®</sup> Habitat <sup>®</sup> Fire Safe	1A:1B pbv	Dough	90 min.	16 hrs.	85D	N/A	17.3	N/A	N/A	Neutral
Free Form <sup>®</sup> Habitat <sup>®</sup> Flex FR	1A:1B pbv	Dough	90 min.	24 hrs.	45D	N/A	17.9	N/A	N/A	Light Brown
Free Form <sup>®</sup> Air	1A:1B pbv	Dough	Varies	24 hrs.	50D	N/A	61.6	N/A	N/A	Grey
Free Form <sup>®</sup> Sculpt	1A:1B pbv	Putty	Varies	overnight	80D	<0.001	20.73	N/A	N/A	Grey

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## Epoxy Adhesives



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

# Epoxy Adhesives For High-Performance Bonding

**Metalset**<sup>®</sup> **A4**<sup>®</sup> 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**<sup>®</sup> has been used for years by all branches of the U.S. Military.

Super Instant<sup>®</sup> 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 46.

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

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

PC-3<sup>®</sup> 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<sup>®</sup> will provide years of worry-free service.



# Sil-Poxy<sup>®</sup> Silicone Adhesive

SMOOTHON

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

SMOOTH

# **URE-BOND® II Urethane Adhesive**

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



**EA-40®** 

is used worldwide for creating strong, flexible, and lasting custom bows.

# **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!

#### Brush-On Starter Kit

#### Make exact copies of 3-dimensional models



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

#### Lifecasting Kit

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



- Alja-Safe<sup>®</sup> Molding Gel
- Casting Plaster
- Quick Start Guide

#### **Pourable Starter Kit**

Starter Kits,

Seminars

Make exact copies of 2-dimensional models



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

# Thousands Of People From All Over The World Have Attended Smooth-On's Two-Day Training Seminars.



Slides, video and hands-on demonstration introduce you to the basics of mold making and casting in an easy-to-understand format.

Attendees make their own molds and castings over the two-day period. In addition, a variety of our "sideshow" demonstrations and applications will open your eyes to a world of material possibility.

www.smooth-on.com/seminars 40

# **Spray® EZ~Spray® Silicone 20 and 22 and 23 and** ayable Materials EZ~Spray<sup>®</sup>

can be sprayed through the EZ~Spray<sup>®</sup> 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<sup>®</sup> Silicone 20 and 22 are ideal for making fast, reusable vacuum bags for producing composite parts. Perfect for Vacuum Bagging & Resin Infusion!

EZ~Spray<sup>®</sup> Silicone 20 is sprayed on the tool.

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

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

### EZ~Spray<sup>®</sup> Silicone 35

EZ~Spray<sup>®</sup> 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<sup>®</sup> 35 for repairing hundreds of grocery store refrigeration units.

Product Name											
EZ~Spray <sup>®</sup> Silicone 20	1A:1B pbv	Sprayable	3 min.	20 min.	20A	< 0.001	25.6	90 pli	420 psi	470%	Green
EZ~Spray <sup>®</sup> Silicone 22	1A:1B pbv	Sprayable	5 min.	45 min.	22A	< 0.001	25.6	92 pli	460 psi	450%	Green
EZ~Spray <sup>®</sup> Silicone 35	1A:1B pbv	Sprayable	1.5 min.	1 hr.	35A	< 0.001	24.1	92 pli	490 psi	415%	Purple
EZ~Spray <sup>®</sup> 45	1A:1B pbv	Sprayable	20 min.	16 hrs.	45A	< 0.001	27.0	100 pli	510 psi	375%	Light Blue

#### Learn more at: www.smooth-on.com

The cured composite car seat is removed and ready for installation.

EZ-Brush<sup>®</sup> Vac Bag

Brushable Version on page 11

### Sprayable Materials

# **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<sup>®</sup> can also be sprayed into a rubber mold to make fast, impact resistant castings.

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

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

StyroCoat<sup>®</sup> coated foam sculpture used for a Broadway production of "Dracula."

**EZ~Spray®** Plastic

sprayed to quickly create a

mother mold/support shell.

also be sprayed into the mold

to create the finished piece.

EZ~Spray<sup>®</sup> Plastic can

### EZ~Spray<sup>®</sup> 45 Urethane Rubber, EZ~Spray<sup>®</sup> 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<sup>®</sup> 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.

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

EZ~Spray<sup>®</sup> 45 produced a flexible mold in a matter of hours.

Product Name StyroCoat<sup>®</sup> Plastic EZ~Spray® Plastic

1A:1B pbv Variable 1A:1B pbv

60 min.

80D

0.015 0.016 24.7

25.0

3,170 psi

2,650 psi

20% 10%

Variable

2 sec. 2 sec. 3 hrs.

75D

Off-White Off-White

6

**Polymer Modified Gypsum** 

#### FORTON FMG Casting System Flame Rated ASTM E-84

Forton<sup>°</sup> VF-812 is a specially formulated, all acrylic co-polymer which cross-links with a dry melamine resin to make the Forton<sup>°</sup> MG moisture resistant and UV stable. FMG<sup>°</sup> is a unique combination of high-strength alpha hemi-hydrate gypsum with water based polymer chemistry that is reinforced with "E" glass fiber. FMG<sup>°</sup> 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. Sculptor Clay Williams uses Forton<sup>®</sup> MG and aluminum powder to quickly make lightweight, durable castings.

# duoMatrix<sup>®</sup>-G

**duoMatrix**<sup>•</sup>-**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<sup>\*</sup>-G can also be pigmented and painted.

duoMatrix® is strong and lightweight.

# duoMatrix® NEO®

An easy-to-use version of **duoMatrix<sup>°</sup>-G**, **NEO**<sup>°</sup>'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**<sup>°</sup> can be used to make lightweight pieces that are very strong and water-resistant. **NEO**<sup>°</sup> is also flame resistant; meeting the **ASTM E-84, Class A (or 1)** flame rating for building materials.

Flame Rated ASTM E-84

duoMatrix® castings are weather resistant and durable.

Learn more at: www.smooth-on.com

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

### **Polymer Modified Concrete**

# 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<sup>®</sup> 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<sup>®</sup> Enhanced GFRC offers faster turnaround, lower labor costs and endless design possibilities.



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



# duoMatrix®-C

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

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

# **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.



Universal<sup>®</sup> Mold Release is made for mold making and casting with urethane rubber and plastic.

#### Aquacon<sup>®</sup> Concrete Release Agent



**Aquacon**<sup>®</sup> is a water based concrete release agent that aids in releasing concrete castings from Smooth-On rubber molds and other surfaces such as melamine, metal and non-porous (sealed) wood. It provides a clean, positive release, does not interfere with color or surface detail and helps minimize bug holes and air bubbles in finished castings.



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

### **Release Agents**



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

Ease Release® 200 Series	Used with silicones, urethanes, & resins - a general purpose release agent
Ease Release® 300 Series	Used with urethane elastomers & epoxy
Ease Release® 400 Series	Used with EPDM, urethane & synthetic elastomers
Ease Release® 500 Series	Dry film mold release & dry lubricant
Ease Release® 700	Used with thermoplastics, melamine & polystyrene resins
Ease Release® 2300 Series	Used with urethane elastomers & epoxy (high viscosity)
Ease Release® 2310	Solvent-based soap release for urethane elastomers
Ease Release® 2831	Used with urethane foam
Ease Release® 2910	Heavy duty release for production casting of urethane elastomers

# 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**<sup>®</sup> 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.

12.5" (31.75 cm)



**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-touse 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<sup>®</sup> 16 FAST, Body Double<sup>®</sup>, Dragon Skin<sup>®</sup>, Ecoflex<sup>®</sup> 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<sup>®</sup> alginate and Matrix NEO<sup>®</sup> with fiber better, and is easy to clean. EpoxAmite® 100

**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.



Equipment

1,500 ml cartridges

(750 ml each)

14" (35.56 cm)

5

(38.

.1 cm)

**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.

# The All New smooth-on.com STO HELP MO 0 OUR PROJECT FORWARD



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