



About Us

materia

For

Tel. 01562 515121 www.benam.co.uk

> We specialise in turning ideas into physical reality by showing you materials that can do things you never thought possible. Our focus is to help people like you convert concepts and project designs into a finished product.

entley advanced material

OCKED

EXPERI

We are easy to talk to and our expertise can guide you to the right materials or equipment for your application.

> **London Location Showcases** Buddy Rhodes Vertical Mix^{**}

Kidderminster Location **Showcases A Medieval Theme**



Condensation-Cure Silicone

Condensation-cure (tin catalyst) silicones, are two-component materials that cure at room temperature to flexible, high tear-strength rubbers. Condensation-cure silicones can be poured, brushed on or sprayed onto a variety of surfaces. Condensation-cure silicones are the economical choice for casting polyurethane, epoxy and polyester resins, waxes, all gypsum products and low-temperature melt metal alloys.

CAPIL

Condensation-Cure silicones from Bentley Advanced Materials are used for a variety of industrial and art-related applications including architectural restoration, prototype model development, reproducing sculpture, and creating special effects and themed environments. There is no better value silicone.

Mold Max[™] Series

- Available in 10A, 20A, 25A, 30A, and 40A Durometers
- High tear strength

Mold Max[™] 14NV and 29NV

- Shore 14A and 29A
- No Vacuum Required

Mold Max[™] T- Series

- Available in 10A, 15A, and 27A Durometers
- Translucent

Mold Max[™] 60

- 60A Durometer
- Heat resistant up to 294°C

Mold Max[™] STROKE[™]

- **O** 30A Durometer
- Brushable

Mold Max[™] XLS[™] II

- **O** 30A Durometer
- Low shrinkage
- Resin Resistant

Mold Max[™] XLS[™] II is an Extra Low Shrinkage silicone is a favourite among prototype shops due to its long term dimensional stability and resistance to chemically harsh resins.

for the tool industry. This two-part mould yields highly detailed, accurate resin castings. Courtesy of Frank Ippolito.

Mold Max[™] 30 Silicone

is used to create awards





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



entley advanced materials

Condensation-Cure Silicone

Mold Max[™] 14NV & 29NV

Offers low viscosity, fast cure and long library life. **Mold Max[™] 14NV** and **29NV** do not require vacuum degassing and will reproduce the finest detail.



Mold Max[™] 14NV & 29NV are suitable for a variety of industrial and art related applications including making moulds or reproducing prototypes, furniture, sculpture and architectural elements

OOMOO[™] 25 & 30

Perfect for beginners, hobbyists and craft makers, **OOMOO[™] 25** & **30** silicone rubbers are easy to use and inexpensive. They don't require special equipment to process and are ideal for making one or two-piece block moulds. **OOMOO[™]** moulds are good for fast prototyping and model making, creating resin jewellery and home hobby projects.

Elkem[®] Series

RTV 3322

- O 22A * Durometer
- Quality at a competitive price

RTV 3325

- 25A to 28A* Durometer
- Extremely good chemical resistance
- Ideal for large production runs



Bentley Condensation-Cure silicones work well for multi-piece production moulds.

* Varies depending on catalyst, see chart on page 47.

PoYo[™] Putty

PoYo[™] Putty mould 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 moulds of valuable antiques, archeological models, sculptures, picture frames, coins and more.





PoYo™ Putty can easily be applied to a vertical surface.

Kidderminster +44 (0)1562 515121 or London +44 (0)2087 516521 • info@benam.co.uk

Addition-cure (platinum catalyst) silicones, are high tear strength, flexible mould compounds. Good for casting a wide range of materials. They exhibit extremely low shrinkage and will last for years in your mould library.



Mold Star[™] Series

Mold Star[™] 14T, 15 SLOW, 16 FAST, 19T, 20T, 30 & 31T are easy-to-use silicones that can be measured by volume and are low in viscosity so vacuum degassing is not required. Mold Star[™] silicones are strong and long lasting mould materials great for casting plaster, wax, resins, etc.



Rebound[™] Series

Rebound[™] 25 & Rebound[™] 40 are easy-to-use silicone rubbers that self-thicken for making brush-on moulds of almost any model. **Rebound[™]** can be applied with a brush or spatula to vertical surfaces without sagging and will cure to a soft, flexible rubber.

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

Dragon Skin[™] Series

Dragon Skin[™] is known around the world as the most versatile silicone available anywhere. **Dragon Skin[™] 10 Very Fast, 10 Fast, 10 Medium, 10 Slow, 10 AF, 10 NV, 15, 20 & 30** silicones are easy to use and can be coloured with Silc Pig[™] colour pigments or the **Psycho Paint[™]** system. **Dragon Skin[™]** silicones are used to create life-like skin and effects for animatronics. They are also ideal for making stretchy "glove moulds" of models with deep undercuts for casting resins, concrete, plaster, etc.

Dragon Skin™ 10 NV low viscosity formulation means vacuum degassing is not necessary. With a 663% elongation stretch which allows you to eliminate the need for a cut seam on some models.

> David Pea puts the finishing touches on the "Darkness" mask made of **Dragon Skin™** with **Psycho Paint™**.

Dragon Skin™ 10 with green **Silc Pig™** silicone colour pigment is stretchy and strong.

entley advanced materials

Dragon Skin[™] FX-Pro

Dragon Skin[™] FX-Pro is specifically designed for creating silicone makeup appliances and skin effects. **Dragon Skin[™] FX-Pro[™]** is compatible with **Skin-Tite[™]** silicone adhesive as well as medical grade pressure sensitive

adhesives for adhering silicone appliances temporarily to the skin.



Ecoflex[™] Super-Soft Series

Ecoflex[™] Super-Soft rubbers are "sister" silicones to the **Dragon Skin**[™] series. **Ecoflex**[™] silicones are extraordinarily soft, strong, durable and offer tremendous wear resistance.

Ecoflex[™] Super-Soft silicones are used for creating incredible skin effects, monster masks and special effects appliances. They are also used extensively for medical cushioning, orthotic and orthopaedic applications.

A foot prosthetic made with **Ecoflex™** is durable and long-lasting.

> Ecoflex[™] 00-35 FAST is a soft, fast cure platinum-catalysed silicone that is versatile and easy to use. The pot life is about 2.5 minutes and rubber cures in about 5 minutes for a permanent mould.

Ecoflex™ 00-30

Ecoflex[™] 00-30 mask in

Psycho Paint[™] system made by Composite F/X.

combination with

mittitititit

Ecoflex[™] 00-31 Near Clear[™] Ecoflex[™] GEL and GEL 2 are an extremely soft, platinum silicone rubber gel specifically designed for creating silicone makeup appliances, for cushioning, creating gaskets, encapsulation, and other applications requiring a very soft silicone material.

A suture pad for medical students created using **Ecoflex™ 00-30** and **Ecoflex™ GEL**

Kidderminster +44 (0)1562 515121 or London +44 (0)2087 516521 • info@benam.co.uk

ne Hubbers

Elkem® Series

RTV 3428 and RTV 3436

- 28A and 35A Durometers
- Ideal for Mouldmaking

RT GEL 8208

• Clear Gel; Ideal for Encapsulation

Dimensionally accurate with very low shrinkage, making them ideal for prototyping.

(them)



Bentley Addition-Cure silicones are used to reproduce sculpture of all sizes and configurations.

Silicones for Vacuum Bagging

Bentley offers silicone rubbers that were specifically developed for making high performance, re-usable vacuum bags. Silicone vacuum bags offer many advantages to traditional bagging materials and techniques. Silicone vacuum bags are durable, contributing to **90% Reduced Labour Costs**. Green Process - no bag film waste reduces environmental impact.

EZ-Brush[™] silicone quickly forms a continuous rubber vacuum bag for production of many Vapor Optimist racing boats.





EZ~Spray[™] 35

EZ~Spray[™] 35 is a 35A durometer silicone rubber developed specifically for spraying through the **EZ~Spray[™] Jr.** Cartridge System. With minimal surface preparation, **EZ~Spray[™] 35** can be sprayed onto vertical surfaces for making fast rubber moulds of large surface areas.

boats by Princess Yachts.

EZ~Spray™ 35 is used to coat steel plates on the bottom of grocery store refrigeration units by creating a silicone liner.

Solaris[™] Clear Silicone Encapsulating Rubber

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



entley advanced materials

www.benam.co.uk

EZ~Spray[™] Silicone 20 is used to quickly create a

large vacuum bag used in the production of luxury

Smooth-Sil[™] Series

Smooth-Sil[™] 933 Flame Out, 936, 940, 945*, 950 & 960 are

Food

Sale

mixed 100A:10B by weight and are ideal for production moulds of any configuration, large or small. Smooth-Sil[™]silicone rubbers exhibit good chemicals, abrasion and heat resistance. Smooth-Sil[™] 940. 950 & 960 are suitable for food grade applications including making chocolate, ice trays, casting butter and baking.

*Smooth-Sil[™] 945 is mixed 1A:1B by weight and volume.



The clarity of SORTA-Clear[™] allows a complex model to be easily removed via cutting without damaging the original.

SORTA-Clear[™]

SORTA-Clear[™] 12, 18, 37 & 40 rubbers are premium water white translucent silicones that are especially useful when extracting models via cutting. SORTA-Clear[™] rubber is ideal for making prototype, jewellery or other moulds where model visibility is important. SORTA-Clear[™] 18, 37 & 40 are suitable for food grade applications.

Rubber Glass[™]

Rubber Glass^{m} is a solid water clear rubber which can be broken or "crumbled" into pieces that look exactly like broken glass, ice or diamonds. Vibrant colours are possible by adding Silc Pig[™], Silc Pig[™] Electric or Ignite[™] colour pigments. Rubber Glass[™] is used to create speciality display pieces and film special effects.



Food Safe Equinox[™] Putty

War Whith Whith the

Equinox[™] 40 is mixed and applied by hand to mould this detailed wall plaque.

Equinox[™] Putty can be mixed and applied by hand for making moulds on the run. Shrinkage is low and cured rubber is exceptionally strong (very high tensile strength). Applications include making fast mould impressions from almost any surface, equine hoof repair, jewellery making and more.

Encapso[™] K

OOKS JUS

Encapso[™] K is the perfectly clear encapsulation rubber that looks iust like water. Unlike chemically harsh resins normally used for encapsulation, Encapso[™] K is safe, non-toxic, and perfect for creating artificial floral displays, water pond effects, etc.

Encapso™ K is perfect for encapsulating artificial floral stems.



Q-Ballz[™]

Q-Ballz[™] is a single component liquid that can be used as a bald cap plastic or for encapsulating silicone gel prosthetic appliances. Thin with acetone to airbrush material into a mould (or over a plastic head form) for creating a membrane. Use as soon as possible after opening.

The edges of a silicone prosthetic appliance encapsulated in Q-Ballz[™] can be dissolved away with acetone. Q-Ballz™ can also be used to create bald caps on an appropriate head form.

Lifecasting Materials Body Double[™] Silicone

Body Double[™] Fast Set and **Standard Set** have become Hollywood favourites for capturing and reproducing faces, hands, and other body parts.



Easily releases from closely cropped hair-covered skin.

PERFECT REPRODUCTION

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

> Unlike alginates, **Body Double[™]** will last for many castings using any material including plaster, **Matrix[™] NEO**, wax, resins (**Smooth-Cast[™]** urethanes, polyester, etc.), low-temperature melt metal alloys, etc.

Body Double[™] Release Cream is a non-toxic skin conditioner that will aid in releasing Body Double[™] mould rubber from skin surfaces with or without hair. It is skin safe and washes off with soap and water.

Body Double[™] is used by Frank/ppolito to make a mould of Neil Patrick/Harris for a scene in the movie "Dracula's Daughters vs. The Space Brains."

> This cold cast bronze casting is a perfect copy of the original model and reflects skin detail down to a fingerprint.

Alja-Safe[™] & Acrobat[™] Alginate Crystalline-Silica Free

Alja-Safe[™] is easy to use, cures quickly, and much less expensive than silicone. Acrobat[™] is a "non-sag" fibre reinforced alginate, perfect for making moulds of the face and torso. Both reproduce fine detail and make an excellent "single use" mould. You can cast plaster, Matrix[™] NEO (polymer modified gypsum), platinum-cure silicone, or

Smooth-Cast[™] 300Q urethane resin into the mould to make a reproduction. These alginates do not contain crystalline-silica (a known carcinogen). Skin Safe



Acrobat[™] is thicker and holds a vertical surface, great for moulds of the face.

Alja-Safe[™] Breeze Liquid Alginate

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

Alja Safe[™] Breeze offers significantly less bubble entrapment vs. powder alginates and is virtually bubble free.

entley advanced materials

Accu-Cast



FaceGel[™] 590 Thicker - Holds Vertical Surface

Accu-Cast[™] FaceGel[™] 590 alginate is an easy to use alginate mould material that is ideal for making layup

moulds used to reproduce fine details of a face. FaceGeI[™] 590 has extra thickener which allows it to hold a vertical surface well with minimal slump.

BodyGel[™] 880 Large Surface Coverage

BodyGel[™] 880 alginate is an easy to use alginate mould material that is an ideal choice for making moulds which require

coverage over a broad surface area of the body such as torsos or full body moulds.

HandGel[™] 570 Fine Details

HandGel[™] 570 alginate is an easy to use alginate mould material that is ideal for making poured moulds used to reproduce fine detail of the hands, feet and other body parts using a large container or bucket.

FUN Silicone[™]

Accu-Cast[™] FUN Silicone[™] is a soft silicone rubber made especially for casting into alginate moulds to make flexible, exact rubber reproductions of body parts. FUN Silicone[™] is easy to use and cures to a strong rubber that is tear resistant and exhibits very low long term shrinkage. Fully cured silicone rubber is certified skin safe. Parts made with FUN Silicone[™] will last a long time and are easy to clean (dishwasher safe). An infinite number of color effects can be achieved by adding

Silc Pig[™] silicone

BabyGel[™] 2 Changes Color when Curing

BabyGel[™] 2 alginate is a fast curing, skin safe alginate mould material that is ideal for making accurate reproductions of your baby's / child's hand or foot. It is unique because when it is mixed with water at 80°F / 27°C, it changes color from pink to grey as it cures.

370-SD[™] Prosthetics & Orthotics

Accu-Cast[™] 370-SD[™] alginate is a fast curing, firm alginate mould material that is ideal for socket duplication in the creation of prosthetics and orthotics. This firm alginate can be poured into a prosthetic socket to assist in the fitment of artificial limbs.

LIFECASTING KITS

Our kits are the fastest way we know to get you started. We have a full range of kits including Baby/Child Hand, Adult Hand, Family Hand, Face, Head and Full Torso Casting. Replacement Alginates, LiquiStone[™] and Plaster Bandages are available. Kits contain everything you'll need - except water. Everything is pre-measured, and our

exclusive "Mix-In-The-Bag" technique makes cleanup a snap.

LiquiStone[™] Easy To Use Casting Gypsum

Accu-Cast[™] LiquiStone[™] is an easy to use gypsum cement that can be cast into Accu-Cast[™] alginate moulds for reproducing human body parts for lifecasting. LiquiStone[™] can be cast solid, or can be laid up by hand (thicker consistency required). Fully cured castings can be machined, sanded, primed and painted.

You can cast **LiquiStone**[™] gypsum cement, plaster, **duoMatrix**[™] **NEO** (polymer modified gypsum) or **Smooth-Cast**[™] **300Q** ultra-fast urethane resin into alginate moulds to make reproductions.

Silicone Accessories FOR USE WITH CONDENSATION-CURE SILICONES

Speciality Catalyst

cata 24h

• Standard kinetics (24h mould release)

cata 6h

• Fast kinetics (6h mould release)

cata 2h

cone Accessories

• Fast kinetics (2h mould release)

Accel-T[™] Silicone Accelerator

is a one-component additive that will reduce the cure time of Smooth-On condensation-cure silicone rubber.

Fast Cat[™] 30 Cure Accelerator

Used in place of (or in combination with) **Mold Max[™] 30** regular Part B catalyst, **Fast Cat[™] 30** will reduce the demould time from overnight to as little as 30 minutes.

PC ACCELERATOR

is an additive designed to decrease the time required to obtain the final properties of Elkem condensation curing RTV-2.

FOR USE WITH ADDITION-CURE SILICONES

Skin Tite[™] Silicone Adhesive

A skin safe silicone used to create fast wounds, scars and skin effect appliances directly on the skin. It can also be used to adhere silicone appliances to the skin.



Q-Ballz[™]

A single component liquid that can be used as a bald cap plastic or for encapsulating silicone gel prosthetic appliances. Thin with acetone to airbrush material into a mould (or over a plastic head form) for creating a membrane. The edges of a silicone prosthetic appliance encapsulated in Q-Ballz[™] can be dissolved away with acetone. Q-Ballz[™] can also be used to create bald caps on an appropriate head form.

Slacker[™] Tactile Mutator

Silicone heart prop made more realistic with **Slacker**™.

A liquid additive used to "deaden" the silicone, making it more flesh-like.

Slo-Jo[™]

Silicone Retarder

Extends the pot life (working time) of addition-cure silicones and Soma Foama[™] silicone foam without affecting the ultimate physical properties.

Dermatac[™] Silicone Makeup Appliance Adhesive & Derma-tac[™] Remover

Derma-tac[™] is a pressure sensitive adhesive designed for

temporarily adhering silicone and latex makeup prosthetic appliances to the skin. **Derma-tac™ Remover** is an easy-to-use one component liquid that will dissolve **Derma-tac™** and aid in removing appliances from the skin.

Psycho Paint[™]

A translucent clear silicone paint base developed to help special effects and prosthetic artisans, doll makers, etc. easily create painted-on colour effects for their silicone creations.



Plat Cat[™] Silicone Accelerator

Reduces the cure time of addition cured silicones without significantly affecting the ultimate physical properties.

Inhibit X[™] Cure Inhibition Reducer

A single component, low-viscosity liquid that provides an added measure of protection against cure inhibition when pouring addition cure silicone rubbers over many surfaces including sulfur clay, instant adhesives, tapes, wood surfaces, some plastics, SLA resins and others.

Slide[™] Liquid Surface Tension Diffuser

Greatly reduces surface tension when added to platinum cure silicone.

NOVOCS[™]

Gloss & Matte Silicone Solvents

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

entley advanced materials

www.benam.co.uk

11

Silicone Accessories

FOR USE WITH ALL SILICONES Si-Tac[™]

Adhesive FOR TEXTILES

Si-Tac[™] is a two-part pourable liquid silicone adhesive that is applied to natural or synthetic fabric/clothing for the purpose of keeping



sports or leisure wear in place during exercise. Garments will not shift or fall. Si-Tac[™] adhesive is very strong, sweat resistant and lasts through many laundry cycles.

- Customised to Your Specifications
- Resists Laundry Cycles
- Solvent Free, Non-Irritating
- Economical
- Sweat Resistant
- Control Rate of Cure with Heat

Colourless & Non Staining

- Highly UV Resistant
- Highly Stretchable
- High Temp Resistance & Low Temp Flexibility

PLACE!



Two **Si-Tac**[™] silicone beads are delivered to a garment surface in a wave pattern. The garment is then passed through a heat tunnel to cure the silicone in under 60 seconds.



Thi-Vex[™] Silicone Thickener

liquid additive that thickens most Smooth-On mould making silicones making it easier to fill in undercuts or to apply to vertical and inverted surfaces. Different viscosities can be attained by varying the amount of **THI-VEX[™]** added.

Fat Eddie Thixo[™]

A concentrated thixotropic agent made especially for thickening Smooth-On silicone rubber products for vertical surface application (making brush-on moulds).

Primer PM 820

A one-component primer that will help the adhesion of silicone to a variety of substrates.

Primer 131

A one-component primer that will help the adhesion of all silicone to a variety of substrates.

Silicone Thinner[™]

A non-reactive silicone fluid that will lower the mixed viscosity of all silicones.

Silicone Oil 47v50

A non-reactive 50cps viscosity silicone fluid that is used to reduce the viscosity of the silicone rubber.

Aphix[™] Silicone Adhesion Promoter

Will temporarily adhere most surgical tapes, bandages, dressings, etc. to silicone rubber surfaces including training mannequins, devices, etc.



are used for colouring all Smooth-On silicones. Create mind blowing skin effects when used with Psycho Paint[™] or Skin Tite[™]. Silc Pig[™] pigments are concentrated, offer excellent dispersion and consistent colour.





Fluorescent Silicone Pigments

*Pantone values are approximate.

Allow more ultraviolet light from the cured silicone to become visible to your eye vs. castings made with standard Silc-Pig[™] pigments. Castings appear brighter in ambient light and appear to glow under UV light (black light).



PMS 1655C PMS 809C

Electric

Orange



Electric

Yellow





Electric

Purple



Silc-Pig[™] pigments are mixed with **Psycho Paint**[™] and applied with an airbrush to paint the finishing touches on

an **Ecoflex**[™] silicone mask.

Kidderminster +44 (0)1562 515121 or London +44 (0)2087 516521 • info@benam.co.uk

STAYS IN

Urethane Rubbers

Used for hundreds of industrial and art-related applications, urethane rubbers are easy to use and exhibit good wear resistance. They can be poured, brushed on or sprayed onto most prepared surfaces and cure with negligible shrinkage. They are economical, reproduce exceptional detail and are best suited for production casting of concrete,

VytaFlex[™] Series

Best for Casting Concrete

Using Smooth-On's exclusive "V-Polymer" technology, **VytaFlex™** urethane rubbers offer superior abrasion resistance for casting concrete.



Peeling back a 6 m mould liner created using VytaFlex™ 60 liquid mould rubber from the original wall model.



ReoFlex[™] Series Best for Casting Gypsum, Wax, Etc.

MANNAIR

ReoFlex[™] urethane rubbers offer a convenient one-to-one by

volume mix ratio and are used for a variety of applications including making moulds to make architectural elements, as well as for making rubber props and prototypes. These rubbers meet the stringent demands of production casting of wax, plasters and other materials.

ReoFlex [™] 20	20A Durometer
ReoFlex [™] 30	30A Durometer
ReoFlex [™] 40	40A Durometer
ReoFlex [™] 50	50A Durometer
ReoFlex [™] 60	60A Durometer

DCCCXAIL

Clear Flex[™] 50 was used to create this oversized coin casting for a children's museum -100% childproof.

Pouring **ReoFlex™ 40** to create stone veneer moulds.

VytaFlex [™] 10	10A Durometer
VytaFlex [™] 20	20A Durometer
VytaFlex [™] 30	30A Durometer
VytaFlex [™] 40	40A Durometer
VytaFlex [™] 45	45A Durometer
VytaFlex [™] 50	50A Durometer
VytaFlex [™] 60	60A Durometer

Clear Flex[™] Series

Clear Flex[™] 30, Clear Flex[™] 50 and **Clear Flex[™] 95** are water white clear urethane rubbers designed for applications that require absolute clarity and UV resistance to sunlight. Vibrant colours are achieved by adding pigments.

Clear Flex [™] 30	30A Durometer
Clear Flex [™] 50	50A Durometer
Clear Flex [™] 95	95A Durometer

entley advanced materials

Finished stone veneer on

RESISTAN

display.

Urethane Rubbers

PMC[™] Industrial Series

The **PMC[™] Industrial Series** are premium performance urethane rubbers that offer exceptional strength, durability and abrasion resistance. They are often used to create industrial parts, concrete stamps and ball mill liners.

Econ[™] 60 & 80

Econ[™] 60 & 80 are lower cost rubbers compared to our popular PMC[™] Series. It is mixed 1A:1B by volume, possess a relatively low viscosity, no odour and cure quickly. They do have lower physical properties compared to PMC[™] Series rubbers but are suitable for many industrial applications including making highly impact resistant prototype parts, fast pour-in-place gaskets and concrete burial vaults.



Brush-On[™] Series

PMC[™] 121 30/WET

PMC[™] 121 30/DRY

PMC[™] 724

PMC[™] 744

PMC[™] 770

PMC[™] 780

PMC[™] 790

Brush-On[™] Series mould rubbers are known for their abrasion resistance and high tear strength. **Brush-On[™]** rubbers paint onto vertical and inverted surfaces without sagging.

30A Durometer

30A Durometer

40A Durometer

44A Durometer

70A Durometer

80A Durometer

90A Durometer

PMC[™] 790 is an

abrasion resistant concrete stamping

excellent choice for moulding tough,

pads.

Brush-On[™] 35 35A Durometer

Brush-On[™] 40 40A Durometer

Brush-On[™] 50 50A Durometer

Brush-On[™] 60 60A Durometer

Brush-On™ 40 is used to restore complex architectural elements.

Compat[™] 45 Non-Inhibiting Urethane Rubber

Compat[™] 45 is a unique urethane rubber which **will not inhibit the cure of most Smooth-On platinum or tin cure silicone rubbers**. It has a mix ratio of 1A:1B by volume, a low viscosity for easy mixing and pouring and

cures with minimal bubble entrapment. Cured rubber is dimensionally stable (low shrinkage), offers good wear resistance and an excellent library life.



Important: Do not use Ecoflex[™] Gel, Ecoflex[™] 00-10, Ecoflex[™] Near Clear, Encapso-K, Rubber Glass[™], Solaris[™] or Sorta-Clear[™] 12 or 37 with this product. They are not compatible and inhibition will result.



Formlastic[™] 48 & 60

Formlastic[™] 48 and 60 filled urethane rubbers are used to make moulds for production casting of concrete. They feature low viscosity for easy mixing / pouring and cure with minimal bubble entrapment. Mix ratio is 1A:1B by volume, and the rubbers cure in 24 hours to an ultimate Shore hardness of either Shore 48A or 60A. Cured rubber is dimensionally stable (low shrinkage), offers good wear resistance and will render colour accurate concrete castings.

General Purpose Plastics

Smooth-Cast[™] plastics offer tremendous versatility and economy. They are easy to use and available as rigids or semi-rigids. You can add different colours and fillers for an infinite variety of finish effects. Perfect for casting detailed models, props and ornamental pieces.

Smooth-Cast[™] Series

Smooth Cast[™] 300 and 320 series plastics are ultra-low viscosity resins that yield bright white (300 Series) or off-white (320 Series) castings. Vacuum degassing is not necessary and they offer the convenience of a 1:1 mix ratio. Fully cured castings are machinable and paintable.

Smooth-Cast[™] 300Q - Very Fast 30 sec. pot life. 4 - 5 min. demould

Smooth-Cast[™] 300 O 3 min. pot life. 10 min. demould

Smooth-Cast[™] 305 7 min. pot life. 30 min. demould

Smooth-Cast™ 310 ● 15 - 20 min. pot life. 2 - 4 hr. demould

Smooth-Cast[™] 320 ● 3 min. pot life. 10 min. demould

Smooth-Cast[™] 321 • 7 - 9 min. pot life. 30 min. demould

Smooth-Cast™ 322 0 10 - 20 min. pot life. 2 - 4 hr. demould

Smooth-Cast[™] ColorMatch[™] 325 series plastics were developed specifically for adding colour. Small amounts of **SO-Strong[™]**, **Ignite[™] & UVO[™]** colour will yield accurate, vivid colours. They are also ideal for creating marble and wood grain casting effects, or duplicating the look of real metal.

Smooth-Cast[™] 325

2.5 min. pot life. 10 min. demould
Smooth-Cast[™] 326
7 - 9 min. pot life. 60 min. demould

Smooth-Cast[™] 327 0 10 - 20 min. pot life. 2 - 4 hr. demould

Smooth-Cast[™] ONYX[™] resin cures quickly to a deep black finish. **ONYX[™]** offers a higher heat resistance, up to 250°F/121°C, and the cured plastic can be polished.

Smooth-Cast[™] ONYX[™] FAST 2.5 min. pot life. 10 - 15 min. demould

entley advanced materials

Smooth-Cast[™] ONYX[™] SLOW o 5 min. pot life. 90 min. demould







ONYX[™] castings can be combined with different metal powders to achieve a realistic metal finish.

General Purpose Plastics

Semi-Rigid Series

Smooth-Cast[™] 45D, **60D**, **61D** and **66D** are low-cost semi-rigid plastics that offer high impact resistance.

Smooth-Cast[™] 57D and **65D** have a unique gradual cure profile making them ideal for rotational casting applications.

Smooth-Cast[™] 45D o 5 min. pot life. 30 min. demould

Smooth-Cast[™] 57D o 3 min. pot life. 30 min. demould

- Smooth-Cast[™] 60D o 5 min. pot life. 30 min. demould
- Smooth-Cast[™] 61D • 7 min. pot life. 60 min. demould

Smooth-Cast[™] 65D
2.5 min. pot life. 10 - 15 min. demould

Smooth-Cast[™] 66D o 7 min. pot life. 60 min. demould

> **Smooth-Cast™ 65D** is used to create rotational castings that are lightweight and use much less material to achieve the same 3-D look.

380 High Density Tooling Resin

Smooth-Cast[™] 45D coloured with

police nightstick.

SO-Strong[™] tints used to make a prop

EMI-RIGID for

Smooth-Cast™ 380 is a filled casting resin formulated for a variety of tooling applications. Its low viscosity ensures minimal bubble entrapment. Cured material is very strong and can be machined, drilled, sanded, etc.



385 Mineral Filled Liquid Plastic

Smooth-Cast[™] 385 is a casting resin that is very hard and durable. The material cures at room temperature with virtually no shrinkage with high compressive and flexural strength characteristics. Fully cured castings are tough, machinable, paintable and resist moisture and mild solvents.



Smooth-Cast™ 385 is perfect for prototype parts like this boat propeller.

Performance Plastics

Do you need higher heat distortion temperatures, strength in ultra-thin sections, high impact, abrasion resistance or flame resistance? **TASK**[™] Plastics were developed with these applications in mind, and many more. There are several **TASK**[™] Plastics to choose from and each is easy to use (convenient mix ratio and low viscosity).

TASK[™] Performance Plastics

TASK[™] plastics are a higher grade of performance 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, low viscosities, high tensile and flexural strength.

TASK™ 2 & 3

• High strength, low viscosity

TASK[™] 4

• Very strong in thin-walled sections

TASK™ 5 & 6

• Lowest cost performance plastics anywhere

TASK™ 7

• UL 94 V-0 Flame rated - fire resistant

TASK[™] 8

• High heat resistant urethane plastic

TASK[™] 9

 COLORMATCH translucent for colour matching and pigmenting

TASK™ 11

- Semi-rigid resin
- Good for dry food contact

TASK™ 12

- Semi-rigid resin
- Extraordinary impact resistance

TASK[™] 13 & 14

 Black semi-rigid urethane casting resins

TASK[™] 15

- Ideal for machine rotocasting
- High impact resistance

TASK™ 16

 High tear strength, impact resistance and wear resistance

TASK[™] 18

• Aluminium filled mass casting resin

TASK™ 21

• High compressive and flexural strength - comparable to ABS plastic



entley advanced materials www.benam.co.uk

Performance Plastics

TASK[™] 12



TASK[™] 16



TASK[™] 18

TASK[™] 21



Crystal Clear[™] **Water-Clear Resin Series**

Crystal Clear[™] resins are unique water clear plastics that have been used worldwide to create spectacular display castings, prototype models, lenses, ice effects for films and much more. Cured plastic is durable and UV resistant.

Crystal Clear[™] 200

- 16 hour cure time
- 1.25 cm 7.5 cm thick castings

Crystal Clear[™] 202

- 90 minute cure time
- 0.16 cm 1.25 cm thick castings

Crystal Clear[™] 204

- 48 hour cure time
- 7.5 cm 15.25 cm thick castings

Crystal Clear[™] 206

- 5 day cure time
- Greater than 15.25 cm thick

Crystal Clear[™] 220 MUST BE HEAT CURED

Harder - easier to polish

Crystal Clear[™] 221 MUST BE HEAT CURED

Harder - easier to polish

Crystal Clear™ 222

- O Mercury Free
- MUST BE PRESSURE CAST
- MUST BE POST CURED



12 tons of resin were cast at one time for this Crystal Clear" sculpture in Trafalgar Square, London.

RESISTAN

Shark' by Pascal Haudressey Size: 3m long, Weight: 400kg

Speciality Plastics

Bentley Advanced Materials offers speciality plastics that go beyond conventional casting applications. Not seeing what you are looking for? Talk to us and we will do our best to find the right plastic for your project.

SMASH![™] Breakaway Plastic

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

KX Flex[™] Fast Setting Urethane Casting Elastomers

KX Flex[™] 40, 60 and 90 urethanes are fast setting two-component systems that cure quickly to semi-rigid plastics that are very tough and impact resistant. Cured plastic is off-white when cured and these products are very easy to color using **SO-Strong[™]**, **UVO[™]** or **IGNITE[™]** colorants.

Make It Fast – Make It Tough: They are used for a variety of applications including making fast-cure moulds, fast model duplication, prototypes, durable miniatures, props and special effects.

KX Flex[™] 40

- 40A durometer
- 2.5 minute pot life
- 30 minute handling

KX Flex[™] 60

- 60A durometer
- 2.5 minute pot life
- 20 minute handling

KX Flex[™] 90

- **90A** durometer
- 2.5 minute pot life
- 20 minute handling

Shell Shock™ can be used to make moulds or brushed into rubber moulds for detailed, lightweight castings.

Shell Shock[™] Brushable Liquid Plastic

Shell Shock[™] FAST and Shell Shock[™] SLOW are thixotropic plastics that self-thicken when mixed and can be brushed onto vertical surfaces or into rubber moulds. Material cures at room temperature with virtually no 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 moulds for creating silicone appliances and effects (use as a replacement for gypsum moulds). You can also brush a "gel coat" into a rubber mould and back it up with rigid foam, creating a highly detailed lightweight casting.

Shell Shock™ Fast

- 3 minute pot life
- Full cure 1 hour
 - at 0.95 cm thickness

Shell Shock[™] Slow
8 minute pot life
Full cure 5 hours at 0.95 cm thickness

entley advanced materials

www.benam.co.uk

19

Speciality Plastics Plasti-Paste[™] II Trowelable Plastic Paste

Holds a Vertical Surface Better Than Any Other Plastic

Plasti-Paste™ III was applied over this 4 m 2 foam core sculptur for strength and durability.

Plasti-Paste[™] II is a

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

Plasti-Paste[™] II is tough and highly impact and abrasion resistant.

Simpact[™] Tough 60A, 80A & 85A Urethane

Simpact[™] 60A, 80A & 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[™] 60A, 80A** & **85A** can be colored with **SO-Strong[™]**, **UVO[™]** or **Ignite[™]** colourants. They are suitable for making impact resistant props, prototypes and display pieces.

Feather Lite[™] Low Density Resin

Feather Lite[™] plastic is so lightweight, it actually floats in water and has a much lower density than other casting resins! Cured plastic can be carved, machined, drilled, sanded, etc. Used for making fishing lures, casting doll heads, figures, and more!

1.8 m long **Feather Lite™** flying fish on display.

Carved foam displays are coated with **StyroCoat™** before being painted and installed in this children's themed park.

EZ~Spray[™] StyroCoat[™] Sprayable Plastic Foam Coating

StyroCoat[™] plastic is formulated to coat 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. Large areas can be covered in a short period of time. Plastic is impact resistant and can be sanded for priming and painting.

Rigid Foams

Mix & pour urethane foams are versatile and easy to use. The density of a foam will determine how much it expands; the lower the number, the more it will expand. Rigid foams can be used to make lightweight castings, create special effects or provide lightweight reinforcement to resins and other materials.

FOAM-iT![™] Series Rigid Urethane Foams

FOAM-iT!™ expanding urethane foams are available in 3, 4, 5, 8, 10, 15 and 26 pound densities.

FOAM-iT!™ 3

18X expansion I minute pot life

- FOAM-iT![™] 4
- 14X expansion • 1.5 minute pot life
- FOAM-iT![™] 4 Black
- 14X expansion
- 1.5 minute pot life

FOAM-iT![™] 5

- 10X expansion
- 1.5 minute pot life

FOAM-iT!™ 8

- 8X expansion
- 1.5 minute pot life

FOAM-iT!™ 10

- 6X expansion
- 1.5 minute pot life

FOAM-iT!™ 10 SLOW

6X expansion

3.5 minute pot life.

FOAM-iT!™ 15

- 4X expansion
- 1.5 minute pot life

FOAM-iT![™] 26

- 2X expansion
- 1.5 minute pot life

FOAM-iT!™ 10 cast from a mould of a chest and painted to be used as a coffee table that is both strong and lightweight. FOAM-IT FOAM-IT FOAM-IT FOAM-IT FOAM-IT FOAM-IT FOAM-IT FOAM-IT 10 15 26 4 4 8 BLACK

8oz. of each **Foam-iT!**[™] material poured into a 32oz. cup.

3



FROTH-PAK[™] Spray Foams The foam machine in a carton

FROTH-PAK[™] is a portable two component polyurethane spray foam kit which enables every professional to produce polyurethane foam of exceptionally high quality, quickly and easily, wherever and whenever required.

FROTH-PAK[™] is intended for use as foamed-in-place insulating air barrier sealant for air leakage control and insulation of gaps, cracks, cavities and joints in the building envelope. It is used for sealing ducts, elbows, valves, tees, and boxes, replacing or repairing insulation in refrigerated containers and refrigerated warehouses. FROTH-PAK™ is used around door and window perimeters, roof/wall intersections, and the sealing of mechanical, electrical and plumbing penetrations in walls, floors, ceilings, attics and roofs. **FROTH-PAK**[™] adheres to most surfaces including wood, metal, masonry, glass, and most plastics.

entley advanced materials

Flexible Foams

FlexFoam-iT![™] Series Flexible Urethane Foams

FlexFoam-iT![™] flexible foams are available in 3, 4, 5, 6, 7, 8, 10, 14, 15, 17, 23 and 25 pound densities. They are the strongest flexible casting foams available anywhere. Vibrant colours can be achieved by adding colour pigments. Ideal for making props, industrial and special effects applications, padding/cushion



8oz. of each FlexFoam-iT![™] material poured into a 32oz. cup.

Soma Foama[™] 15 & 25 **Flexible Silicone Foams**

Soma Foama[™] 15 & 25 are soft, twocomponent platinum silicone flexible foams. They are versatile, easy to use and can be poured into a mould or over other surfaces. Compatible with platinum silicone rubbers, cured foam has high heat resistance (up to 350°F / 176°C).



Soma Foama™ 15 & 25 produce lightweight, flexible castings. They can be used for a variety of industrial and special effects applications including making foam filled appliances, padding/seat cushioning, orthotics/orthopaedics, potting and encapsulation of electrical circuits and vibration dampening.

Kidderminster +44 (0)1562 515121 or London +44 (0)2087 516521 • info@benam.co.uk

Urethane Accessories

UreCoat[™] 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...

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 the substrate.

Coating can be coloured and fillers can be added for unique painting effects!

UreCoat[™] Matting Powder System

UreCoat[™] Matting Powder is dissolved in solvent (99% isopropyl alcohol or acetone) and then mixed with UreCoat[™] Urethane to create a coating that can be applied to a variety of surfaces to eliminate gloss or shine. Coating can be brushed or sprayed using an HVLP spray gun onto some surfaces to create a lasting matte finish. Compatible surfaces include Smooth-On flexible urethane elastomers, urethane foams and epoxies.

IGNITE[™] Fluorescent Pigments

make castings come alive. The fluorescent or "glow" effect is maximised under black light.



Available in 9 colour sampler pack!

CRYPTOLYTE[™]

Cryptolyte[™] causes castings to glow a bright blue under a focused ultra violet light.

BLE



UV (Black) Light





- Dry gas blanket designed to extend the shelf life of unused polyurethane products.
- **SUN DEVIL**[™] Will slow colour change and physical degradation due to UV exposure.
- **SO-CURE**[™] Accelerates the cure time of urethane liquid plastic products.
- **Kick-iT!**[™] Accelerates the cure time of urethane liquid rubber products.





Specially blended powders that can be added to some Smooth-Cast™ liquid plastics or liquid rubbers to create realistic stone effects in finished castings. There are 10 granite effect powders to choose from, each with its own particle size and colour. **Quarry Tone™ Powders** are the fastest way to create realistic granite and stone effects in minutes!

entley advanced materials



www.benam.co.uk

25

Urethane Accessories

Metal Powders For Cold Casting

"Cold-Casting" is a term used to describe the process of mixing metal powder with a resin and applying the mixture into a mould. **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.





URE-FIL[™] fillers disperse easily in Smooth-On materials. Some fillers are designed for cost-savings, others are designed for specific casting effects or improved physical properties.

URE-FIL[™] 3 is a ceramic filler that is white in colour and will give plastic castings a ceramic or porcelain-like finish.



URE-FIL[™] 5 is a lightweight 'pecan flour' style 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™ 7 is added to resin to produce amazing marble effects.

URE-FIL[™] 5 is added to resin to produce wood effects.



URE-FIL[™] 9 is a lightweight filler that can be added to rubbers and plastics as a thickener for brush-on applications.

URE-FIL[™] 11 is a fibre-based filler that can be added to Smooth-On urethane and silicone rubbers, urethane plastics and epoxies to thicken for brush-on applications

URE-FIL[™] 13 is a poly-blend filler used to thicken urethane plastics and epoxies for vertical surface application. It is added in small amounts for thickening, which allows for additional strength in cured plastic pieces. Flexible urethane mixed with URE-FIL[™] 13 can produce a carveable and stampable finish.

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

URE-FIL[™] 17 are small grain aluminum pellets (400 micron). Smaller grain pellets will settle into areas of detail better, reducing voids between particles.

URE-FIL[™] 19 are pure aluminum pellet fillers (1200 micron) used with liquid epoxy and urethane resins to improve thermal conductivity, dimensional stability, reduce shrinkage in large mass castings, etc.



URE-FIL™ 19 large grain aluminum pellets are used to make resin jewellery.

Laminating Epoxy Systems

EpoxAmite[™] 100

Epoxy Laminating System is an easy-to-use liquid epoxy system formulated for a wide variety of fabrication applications. **EpoxAmite™ 100** Laminating System is unfilled, low in viscosity, odourless and cures at room temperature.

> **EpoxAmite™ 100** can be used with a variety of reinforcements

EpoxAmite[™] WHILE

Perfect for wet lay-up, bonding

section casting, water proofing,

patching & small laminates.

repair, gel or, barrier coating, thin

101 Fast 102 Medium 103 Slow

Mix

EpoxAmite[™] 100 can be used with reinforcements such as S-Glass, E-Glass, Kevlar and carbon fibres for lay-up applications or composite parts. **EpoxAmite[™] 100** can also be mixed with fillers such as fumed silica for gel coat applications. Fillers can also be added for fairing, filleting or bonding applications.

Apply

EpoxAmite[™] HT

Epoxy Laminating System Water clear, UV resistant laminating epoxy that resists temperatures up to 149° C when properly cured.



Easy to process and brush, **EpoxAcoat™ RED** Surface Coat is a standard for many applications.

EpoxAmite™ 100 produces dimensionally strong, lightweight high performance parts.

EpoxAcoat[™] Epoxy Surface Coating Red, Grey, White, Neutral & HT

Thixotropic epoxy gel coats that are widely used for hand laminating/tooling applications. They are tough and strong surface coat resins that cure at room temperature and offer exceptional abrasion resistance. **EpoxAcoat**[™] are easy to use, wet out well over a variety of surfaces and will coat vertical surfaces without sagging. They are designed to complement and work well with our **EpoxAcoat**[™] Laminating System (used as a backup for making tools, patterns, fixtures, etc.). **EpoxAcoat[™] HT** is slightly Thixotropic and offers high heat resistance (post cure required). Cured epoxy offers exceptional abraision resistance.

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

Plasti-Paste[™] EPOXY Fiber Filled Trowelable Epoxy

Designed for vertical surface application, **Plasti-Paste™ EPOXY** is fiber filled and can be used as a "mother mould" material to reinforce rubber moulds. This resin is also a powerful adhesive and can be used as a repair material for a variety of industrial applications. Cured plastic can be sanded, machined and pigmented. **Plasti-Paste™ EPOXY** can be painted with acrylic enamel paints.



entley advanced materials

Castable Epoxy Systems

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. Available in both off white and black.



EpoxAcastTM 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™ 650 is used for encapsulating sensitive electronics.

Choose Fast, Medium or Slow catalyst to fit your project. You can also use HT Hardener to give your castings higher heat resistance. **EpoxAcast™ 650** is used for making hard dies for metal stamping as well as

patterns and fixtures. It is also used for electrical encapsulation to extend the life cycles and enhance the performance of potted electronic devices.

vacuum forming dies.

EpoxAcast[™] 655 is commonly used for

EpoxAcast[™] 655

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



EpoxAcast[™] 670 HT High Temp Castable Epoxy

EpoxAcast™ 670 HT offers exceptionally high temperature resistance to 177°C and low shrinkage. It is used for making high temp resistant industrial parts and tooling, high-speed hard rollers, prototype injection moulds, vacuum forming dies and fixtures.

EpoxAcast™ 670 is used to make prototype high heat injection moulds.

Perfect for

resin jewellery craft.

EpoxAcast[™] 690 & 692 Clear Castable Epoxy

A clear casting epoxy that is ideal for making clear jewellery/beads or replacement lenses for kit cars, etc. Colour with with **UVO™** or **IGNITE™** colourants or add **Cast Magic™** powders for different effects. Also suitable for making prototype parts. *"Biver" table is*

"River" table is created using **EpoxAcast™ 692** for deep pour castings up to 2 inches.

Kidderminster +44 (0)1562 515121 or London +44 (0)2087 516521 • info@benam.co.uk

Speciality Epoxies

Tarbender™

is a clear liquid epoxy that can be poured over a variety of surfaces to provide a strong, high gloss coating. Parts A and B mix together and flow easily. **Tarbender**[™] epoxy cures at room temperature and offers high impact resistance.

Tarbender[™] is an excellent wood bar top coating and can also be poured over plaster, concrete, foam, fabrics, etc.

You can use **Tarbender**[™] to encapsulate 3-D objects or coat flat objects, paper and more.

Tarbender[™] is used to create this comic book super hero themed end table. Comics pages are cut and glued onto table, then **Tarbender[™]** is poured across table surface. **Tarbender[™]** displays a high gloss, durable finish.

3

EPSILON[™] EPS Foam Coating Epoxy

is a two-part thixotropic epoxy coating that self thickens for brushing onto a variety of surfaces without sagging. This product was developed for fabricators that regularly coat EPS foam.

Cured material is easily sanded, primed and painted. When applying to vertical surfaces, **EPSILON™** wets out uniformly. Only 2 layers are required to build an adequate thickness and provide an impact resistant coating.



Epsilon™ is used to coat large foam tusks for an archway show display. Courtesy of Frank Ippolito.



EPSILON[™] PRO

is a thixotropic epoxy coating that self-thickens for brushing onto a variety of surfaces. Compared to original **EPSILON™**, **EPSILON™ PRO** offers a longer working time and cured epoxy is semi-rigid, offering better impact resistance.



Epic[™] Epoxy Thinner

is a clear, water-like liquid that will lower the viscosity of casting and laminating epoxies. **Epic[™]** can be added in different proportions to an epoxy system and improves flow-ability, making it easier to mix and pour. **Epic[™]** will also aid in reducing bubble entrapment.

XTC-3D[™] 3D Print Coating

XTC-3D[™] is a protective coating for smoothing and finishing 3D printed parts. This coating self-levels, wets out uniformly without leaving brush strokes, & cures to a hard, impact resistant coating that can be sanded, primed and painted. **XTC-3D[™]** is inexpensive to use. (1 oz covers 100+ square inches) & adding colours and metal effects is easy.

entley advanced materials



Epoxy Putties

Black & Fire Safe Epoxy Putties

are mix-by-hand putties that are used to create textured or highly detailed display pieces. **Habitat[™] Epoxy Putties** are solvent-free and contain no VOC's. They cure to a very hard, heat resistant material that is easily painted.

Habitat[™] 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[™] Epoxy Putties are also used for general sculpting and theming applications. Free Form[™] Habitat[™] Fire Safe is flame rated (E84, Class A).



3. Texture stamp



Frank Ippolito quickly fabricated a durable Colossal

"Bore Magala" Dragon display model using **Habitat™** over carved foam. Scales, teeth and other details are perfectly sculpted and finished to dazzle. **Habitat™ Epoxy** is strong enough to stand on. Dragon measures 5m.

Free Form[™]

Use with **Habitat[™] Folding Powder** – fold powder into epoxy putty to thicken & reduce stickiness; making the epoxy easier to handle.

1. Create an armature



2. Apply Epoxy



Habitat™ Epoxy Putty can be stamped with a silicone rubber stamp to create repeating patterns with intricate detail. Once cured it can painted using Acrylic paints.



Fre<mark>e Form[™] Habitat[™] Flex FR</mark>

Free Form Habitat[™] Flex FR is a semi-rigid version of the very rigid Habitat[™] 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.



Flame Rated Flexible Epoxy Putty

Epoxy Putties

Habitat Cast N Coat™



is a heavily filled, pourable epoxy that can also be thickened with **Habitat**[™] "Folding Powder" for brushing or trowelling onto vertical surfaces.

It certifies to the highest flame rating **(ASTM E84, Class A)**, making it especially suited for public space fabrication applications.

Mix ratio is 1A:1B by volume, working time is about 1.5 hours and material cures overnight to a durable plastic that can be machined, sanded, painted, etc.

Like other **Habitat**[™] epoxies, it is safe to be used in aquariums or in proximity to animals/reptiles (zoo fabrication).

Habitat Cast N Coat[™] bonds to a variety of materials and can be applied as a fire rated, protective/decorative coating to a variety of surfaces including EPS foam.



Cast N Coat[™] works well to coat foam signage and props. It produces a glossy, smooth, easy to paint surface.



Free Form[™] SCULPT Epoxy Putty

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

Free Form[™] Detailer

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

Free Form[™] AIR, AIR HT, AIR Fire Safe & AIR FAST Light Weight Epoxy Putty

is 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 moulds, as a filleting material in epoxy tooling, or in between layers of **EpoxAmite[™]** and fibreglass cloth, carbon or other fiber for making lightweight composites. **Free Form[™] AIR HT** is capable of withstanding 400°F / 204°C

(post cure required). **Free Form™ AIR Fire Safe** certifies to the highest flame rating available (**E84, Class A**). **Free Form™ AIR FAST** cures in 6 minutes in a 60 gram mass (2 oz) and handling time is 30 minutes (tack-free, hard surface).

entley advanced materials

www.benam.co.uk

мιх

High Performance Adhesives

Metalset[™] A4 Aluminium Filled Epoxy Adhesive



Metalset[™] A4 is a powerful epoxy adhesive that has been used for years by all branches of the U.S. Military as well as every major airline and auto manufacturer in the world. A4 is used for hundreds of industrial bonding applications and offers excellent adhesion to porous or non-porous surfaces.

PC-3[™] Laboratory Tabletop Epoxy Adhesive

PC-3[™] Laboratory Tabletop Cement is a two-component, black epoxy resin compound designed to join, bond and caulk sections of laboratory counters and tables. The epoxy resin cement is heavily filled and will adhere to vertical surfaces without sagging.



Super Instant[™] Rapid Adhesive

Super Instant[™] epoxy is a two component clear adhesive designed to provide rapid bonding. **Super Instant**[™] adheres to metals such as steel, aluminium and brass, to wood, glass, masonry and many hard plastics and other substrates.

EA-40[™] Laminating Epoxy Adhesive

EA-40[™] clear epoxy is an unfilled low-viscosity epoxy adhesive.
EA-40[™] is versatile and can be used for many different projects.
Bow makers use EA-40[™] as a laminating resin. EA-40[™] provides highly moisture resistant bonds meeting the performance requirements for Federal Specification MMM-A-188, Type III.

EA-40™ is used worldwide for creating strong, flexible, and lasting custom bows.

One Component Silicones

CAF 1

• Low viscosity, resistance to high temperatures and chemicals

CAF 30 • Industrial grade, non-flowing CAF 33

Industrial grade, non-flowing

CAF 4

Self leveling, thermal resistant

CAF 5661

• Designed for gasketing needs

Ure-Bond[™] 90

A two component, slightly expanding urethane adhesive that offers a strong, rigid bond between many different surfaces. It is often used to bond segments of tooling board as well as other porous and non-porous, rigid substrates.

MT-13[™] Premium Epoxy Adhesive

MT-13[™] is a premium performance epoxy for applications requiring maximum holding power and water resistance. **MT-13[™]** is a two component epoxy adhesive cement which is mixed in equal parts by volume and gels in a few hours. It adheres extremely well to both porous and non-porous surfaces. **MT-13[™]** is widely used by the boating industry for assembly and general repair.

Sil-Poxy[™] Silicone Adhesive

Sil-Poxy[™] is a one component adhesive made specifically for bonding RTV silicone rubber to silicone rubber and other substrates. **Sil-Poxy[™]** will work with condensation or addition-cure silicones and provides a strong, flexible bond between silicone parts with high elongation.



Ure-Bond[™] II Urethane Adhesive

URE-BOND[™] II is a two component urethane adhesive compound that offers a strong flexible bond between many different surfaces.

URE-BOND[™] **II** is ideal for adhering polyurethane rubber and other polymer products to many types of substrates of both and non-porous materials



Gypsum / Plasters



oncrete, Gypsum, Plasters

Crystacal® R

High Impact Resistance Plaster

Crystacal® R is a high strength plaster that can be used to produce Glass Reinforced Gypsum (GRG) structures and decorative pieces where a hard finish is required. This plaster is ideal for film set construction where it is used in the manufacture of flooring, wall panels and props.



Built by hand using **Crystacal® R**, these miniature reproductions of Casa Battlo and The Irish Government Building are just two of many created by Timothy Richards of England.

Crystacal[®] Lamina Polymer Enhanced Plaster

Perfect for casting thin and/or larger sections or panels. **Crystacal® Lamina** is especially known for producing a smooth surface finish that is highly resistant to impact.





Ceiling rose made from **Crystacal® Lamina** by spraying plaster into a mould which is new technique.



Keramicast[®] Fibrous Plasterwork & General Casting

A versatile plaster used for film set construction and also fibrous plasterwork where extra strength is needed. Ideal for bulkheads, lighting profiles, columns, skirtings and dado rails.



Fine Casting Plus

Ideal For Film Studio Set Building And Fibrous Plasterwork

Fine Casting Plus is used for the manufacture of decorative pieces such as coving, cornices, columns, models and props, and has become the industry standard for film set construction.

Herculite[®] Fibrefix

An excellent adhesive for fixing all plasterwork as well as for filling and stopping. **Herculite Fibrefix** is ideal for onsite use where strong adhesion and longer working time is necessary.



Buddy Rhodes[™] Concrete Products

Buddy Rhodes[™] materials are an invitation to join the evolution in Artisan Concrete. Materials that are easier to use, perform at the highest level available in artisan concrete and that expand the possibilities for makers around the world in ways that only time will reveal.



Gypsum / Plasters

duoMatrix[™]-G Industrial Polymer Additive System for Gypsum

duoMatrix[™]-G is a polymer additive system for alpha gypsums that greatly enhances physical and performance properties.



Castings are stronger, lighter, weather resistant and can be demoulded four times faster. Its versatility allows adding of metal powders and other fillers to simulate the look of metal, stone and other facades. **duoMatrix™-G** can also be pigmented and painted.

Sprayed GFRC Domes were created for the Metropolitan Museum of Art, New York, NY

duoMatrix[™]-C

Concrete With An Attitude!

duoMatrix[™]-C is a polymer additive for concrete that greatly enhances physical and performance characteristics. It greatly reduces water/salt absorption and virtually eliminates microcracks. Freeze/

> thaw, chemical and UV resistance are also enhanced. **duoMatrix[™]-C** also eliminates the need for a 7-day post cure.

duoMatrix™-C is perfect for many types of applications.

NO SCALE



duoMatrix[™] NEO

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

Easy To Use Polymer Modified Gypsum



Matrix Dryve[™] Dry Polymer Modified Gypsum



Matrix Dryve[™] is an "all-powder" alternative to our original duoMatrix[™] NEO powder/ liquid system. Dryve[™] is easy to use and can be cast solid, slush cast, rotationally cast, laid up by hand with chopped glass fibre or sprayed. Fully cured pieces are strong, water-resistant and can be painted, sanded, machined and more. Dryve[™] certifies to the highest flame rating (ASTM E-84, Class A), making it suitable for building materials.



Kidderminster +44 (0)1562 515121 or London +44 (0)2087 516521 • info@benam.co.uk

Plaster Accessories



Plaster Accessories

A fine grade fire retardant mineral used for bulking out Gypsum Plaster. Helps to cut down on the weight of large castings.

Matrix Plaster Pigments

A water-based liquid colour pigment that gives great depth of colour to Gypsum Plasters compared to powder pigments of the past.

Unifilo Glass Reinforce Matting

A high performing continous filament E-glass reinforcing matting. Used to help aid high performance Gypsum like Crystacal Lamina and Crystacal R, where lightweight thin section casting are required.

> Heavy Duty Floor

> > Scrapers

Splash

Brushes

Plaster Tools

French Chalk

A versatile filler and release agent, French Chalk has been used as a release agent for plaster In the ornate fibrous plaster industry. It

also works well as a release barrier when casting low melt alloys into silicone moulds. This allows an even flow of hot metal over the silicone rubber mould surface, thus decreasing any pitting on the final metal castings. French chalk can also be used as a filler for polyester, epoxy and polyurethane resins.

Tri-Sodium Citrate

<text>

Hessian Scrim

A low cost, dense woven

plasters to give added

42-Litre

Mortar Tubs

Flexi

Splash

Bowls

fabric made from jute plant.

strength. Roll Sizes are 3",

6", 12", 18" and 36" wide.

3 Gallon

London

Buckets

Gorilla

Tubs

Available in 2 sizes, 14ltr and 42ltr

Ideal for reinforcing Gypsum

A retarder for Gypsum Plasters that allows longer working times with all grades of gypsums.

Timber Laths

Fine cut timbers used for reinforcement in Gypsum casting. Sizes are 3mm and 5mm thick, 20mm wide and 3000mm long.

Shellac Sealer

Dark button polish that is traditionally to seal the surface of Gypsum Plaster.

Tallow

Beef drippings used traditionally as a release agent for casting Gypsum from Gypsum.

Plaster Aprons

Heavy Duty PVC



Zinc Sheet Size: 2400x900 Thickness: 11 gauge

entley advanced materials

www.benam.co.uk

Banister

Brushes

General Accessories



Polyester Systems & Accessories Scott Bader - Crystic[®] & Bufa[®]

Crystic[®] Gelcoat 65PA

Crystic® Gelcoat 65PA is a high performance isophthalic gelcoat. It is pre-accelerated and formulated for brush application.

Crystic® Gelcoat 65PA is recommended for use in all markets including marine, land transport and building applications.

Crystic[®] 73PA

Crystic[®] Gelcoat 73PA is a halogen free fire retardent brush pink gelcoat which meets BS476 part 7 class 2 with 2.7300PA.



Clear Brushing Gel Coat is a Lloyds & WRAS approved, isophthalic gel coat with excellent handling characteristics.

Crystic[®] 1355PA

Crystic[®] **1355PA** is a filled orthophthallic resin, Class 1 to BS 476 part 7 without gelcoat.



GC290-CLEAR BRUSH GELCOAT

UN:1866

BUFA

GC 65PA

Crystic[®] 2-8500PA

Crystic® 2-8500PA is a

low styrene emission, pre-accelerated, orthophthalic polyester resin, which rapidly wets out reinforcements. It is a general purpose resin and has been specifically designed for noncritical and industrial applications

Synolite[™] 5410 P-4

Synolite[™] 5410 P-4 is a versatile Ortho resin for Hand lay-up and Spray-up processes with Low Styrene Emission (LSE) system. The resin is particularly suited for industrial and drinking water applications and is WRAS approved.



GC 73PA

1355 PA

entley advanced materials

Polyester Systems & Accessories

Laminating & Casting Resins

471PALV Rapid Hardening Resin

Rapid curing resin

2.8500PA General Purpose Resin

A general purpose resin with a low emmision of styrene

65PA General Purpose Gelcoat

A general purpose Gelcoat with good water resistance. Marine applications or industrial applications requiring colour stability when exposed to sunlight.

Bentley Clear Casting Polyester Resin 700L A low cost, low viscosity water clear casting resin.

Fireguard[®] Gelcoat 73PA

Halogen free fire retardant brush gelcoat which meets BS476 part 7 class 2 with 2.7300PA

1355PA Filled Orthophthallic Resin

Class 1 to BS 476 part 7 without gelcoat

HD v 50 Polyester Repair Filler

A polyester repair putty ideal for reducing sharp radius and angles after gel coats to allow easier application of glass mats. Also used as a general repair to fibreglass.

Catalyst & Accelerators

MEKP Hardener

A general medium activity catalyst for hardening all polyester resin systems.

Cobalt Accelerator

For the experienced polyester resin workers only. This is an accelerator to be added into polyester resin where quicker setting times are required. (This accelerator should be thoroughly mixed into

polyester resin before catalyst is added).

Polyester Accessories

Catalyst Dispensers

A useful dispensing bottle with a measuring scale marked on the side.

Paddle Rollers

These rollers come in a variety of sizes, used for rolling resin into glass mats. Helps consolidation of GRP laminate by removing air bubbles and excess resin.

Llewellyn Ryland Polyester Pigments

Numerous colours available as paste pigments and some available in transluscents.

Laminating Cloth & Strands

Chopped Strand Emulsion Bound Matting

This is the most commonly used reinforcement with polyester resin for hand lay up application. Strands of glass fibre held together with an emulsion binder which the polyester resin dissolves.

Chopped Strand Powder Bound Matting

This is not so common but is better for use with epoxy resin systems or laminates that may require translucency.

Chopped Strand Choppies

Choppies are fine strands of Chopped glass approx. 25mm in length and supplied in 25 kg bags. Choppies are used to reinforce polyester, epoxy and polyurethane resins. Can also be used in gypsums.

Surface Tissue

Surface tissue is a fine glass fibre material used to smooth out any rough surfaces created by the glass fibre matting. This is normally applied on finished castings with a resin flow coat.

Polyester Fillers

Easy Sand Filler

• Easy to sand, ideal for repair work, pinhole free

U-Pol "b"

• A glass fibre reinforced filler

Polyester Hard Wax Releases

Mirrorglaze M8711

• High performance wax for high temperature

Mirrorglaze 1611

• A Carnauba-based wax for elevated temperature applications

Sealers & Release Agents

Sealers

Ű

(0 (1) (1)

Û

 \int

SuperSeal[™] Economical, low viscosity, sealing agent for a variety of surfaces that can be easily washed off.

Sonite[™] Wax A soft paste wax used to seal highly porous surfaces.

Ease Release[™] 2831 Liquid wax designed to seal with minimal build-up.

Release Agents



Mann Release Technologies release agents cover many applications. Aerosol and non-aerosol, solvent based or water based; made especially for mould making and casting.

Ease Release[™] 200 Series

Releases Silicone from Silicone Used with silicones, urethane and resins

Ease Release[™] 300 Series

• Used with urethanes & epoxy

Ease Release[™] 400 Series

• Used with EPDM, urethane and synthetic elastomers.

Ease Release[™] 500 Series

• Teflon based dry film mould release and dry lubricant.

Ease Release[™] 700

• Used with thermoplastics, melamine and polystyrene resins.

Ease Release[™] 2125

• PVA used to release polyester resin

Ease Release[™] 2300 Series

• Used with urethane elastomers and epoxy (high viscosity).

Ease Release[™] 2310

• Solvent-based soap release for urethane elastomers

Ease Release[™] 2831

• Wax-based release for urethane foam

Ease Release[™] 2910

 Heavy duty release for production casting of urethane elastomers **One Step**[™] Convenient, economical liquid that seals porous surfaces and releases urethane rubber in a single step.

Vinyl Strippable Coating provides a protective coating that is easy to remove from smooth, unpainted surfaces.

2K Acrylic Sealer provides excellent topcoat holdout for superior gloss.

Universal[™] Mold Release



Universal[™] Mold Release is made for mould making and casting with urethane rubber and plastic.

AquaCon[™] Concrete Release Agent



AquaCon[™] 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 colour or surface detail and helps minimize bug holes and air bubbles in finished castings.

MacWax[®]

• Wax-based release for urethane foam

RL247 Wax

• General purpose wax release agent

Mould Cleaner 2508

 Formulated to clean build-up associated with moulding thermoset resins

Kwikee[™] Sprayer



An economical alternative to aerosols for dispensing liquid release agents

for dispensing liquid release agents and sealing agents, the **Kwikee[™] Sprayer** delivers sealing agent or release agent in a fine mist.

entley advanced materials

Tools & Equipment

EZ~Spray[™] Jr.

The **EZ[~]Spray[™] Jr.** is a versatile, convenient and easy-to-use spray system for spraying 1500 ml cartridges of **EZ[~]Spray[™]** mould making and casting materials for large projects. The **EZ[~]Spray[™] Jr.** gun comes with 1 small tip assembly and 1 large tip assembly. Additional static mixers are available. Compressor not included.



1500 ml. cartridges (750 ml. each)

Vacuum Chambers

Vacuum chambers are for removing air from high viscosity materials like silicone rubber before pouring. They are also ideal for vacuum degassing liquid plastics such as **Crystal Clear**[™] plastic for making bubble free castings. Different size chambers and pumps are available on request from Bentley.

Vacuum pump not included.



Pressure chambers are 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.**



entley

31.75 cm

38.74 cm



Mixing Containers

Plastic mixing containers with graduated markings. Containers are available in 16 oz., 32oz., 64 oz., and 165 oz. sizes. Sold individually & packaged in cases of 10, 50 or 100.



Turbine Mixer

Used for mixing rubbers, plastics, and foams. It also mixes powder-based **Alja Safe**[™]

alginate and duoMatrix[™] NEO with fibre better, and is easy to clean. Tools & Equipment

Starter Kits

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

ECAST

Alja-safe ing

11

Lifecasting Starter Kit

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

Includes

Starter Kits

- Alja-Safe™ Moulding Gel
- Casting Plaster
- Quick Start Guide

Pourable Starter Kit

Make Exact Copies of 2-Dimensional Models.

- A HOW-TO BOOKLET!
- OOMOO[™] 30
 Moulding Rubber
- Smooth-Cast[™] 300 Casting Resin
- SuperSeal[™]
 Sealing Agent
- *Ease Release*[™] 205 Release Agent
- Quick Start Guide



Ultimate Zombie Kit[™]

Make Your Own On-Skin Wounds In Minutes.

Includes

- Step-By-Step How-To Guide
- Thi-Vex[™] Silicone Thickener
- Skin Tite[™] Silicone
- O Silc Pig[™] Pigment
- Makeup
- Rubber Glass[™] Cured Disks
- Zombie Teeth
- Mixing Sticks
- Mixing Cups

liet Holes

41

Ultimate Blood Kit[™]

The Only Blood Kit You Will Ever Need

- Ultimate Blood[™] Base
- Ultimate Thixo™
 Blood Thickening Agent
- Ultimate Thinner
 Blood Thinning Agent
- Ultimate Colour Tints Red, Yellow & Blue Colour Additives
- Mixing Sticks
- Mixing Cups

Ultimate Wound Kit[™]

Make Your Own On-Skin Wounds In Minutes.

Includes

- Skin Tite™ Silicone
- Thi-Vex™ Silicone Thickener
 Silc Pia™ Piamont
- Silc Pig[™] Pigment
- Rubber Glass[™] Cured Discs
- Mixing Sticks & Cups
- Step-By-Step How-To Guide

Great For Casualty Simulation Training: • Medical • Forensic • EMT • Military

ultimate Wound Ki

entley advanced materials

Ultimate Vine Making Kit[™]

The Ultimate Vine Making Kit[™] lets you experience making your own hyper-realistic vine that is "Animal Tough" and durable, UV resistant & long lasting for indoor or outdoor displays and exhibits.

There is enough material in this kit for you to make a 1.53 m (5 ft.) vine using 2.54 cm (1in.) diameter rope.



This Vine Making Kit Contains:

- O Simpact[™] 80A Urethane Rubber
- O URE-FIL™ 13 Poly Fiber Filler
- UVO[™] Pigments (Brown, Green & White)
- Play Sand
- Rebound[™] Silicone Texture Stamp
- Wooden Sculpting Tool

Make Vines & Branches that are: • Realistic • Rugged

Starter Kits

Other Items You Will Need: Not Included

Flexible

- 1.53m (5 ft) of marine grade nylon rope 2.54 cm (1in.) diameter
- Gram Scale
- Measuring and Mixing Containers
- Mixing/Paint Sticks

0

- Protective Eyewear
- Sheet Plastic/Tarp
- Vinyl Disposable Gloves
- O Chip Brushes
- Paint (Solvent or Water Based Acrylic Paints Suitable for Outdoor Use)

The Archery Target Repair Kit[™]

The kit contains everything you need to make durable, lasting repairs to foam targets. Learn how to quickly and easily repair targets using Smooth-On's **Flex Foam-iT!™ 15** polyurethane foam.

Archery targets will get damaged over time, requiring costly replacement.

Make repairs at a fraction of the cost!



- Easy to Apply
- Long Lasting Repair
- Repair Is Stronger Than Original Target Core

Kidderminster +44 (0)1562 515121 or London +44 (0)2087 516521 • info@benam.co.uk

Clays & Sculpting Tools

havan

Bentley Advanced Materials offers a variety of Modeling Clays and Sculpting Accessories for the discerning artist. Whether you're venturing into your first sculpting project or you're an experienced sculptor. We can supply you with the necessary tools and materials to get the job done.

SULFUR FREE | CONSISTENT QUALITY | LOW TACK FEEL CASTABLE | CAN BE MELTED & REMELTED | SILICONE FRIENDLY

FOR PRECISION MODELING

Alien Clay[™] is a precision sculpting medium used for a variety of sculpting and fabrication applications. It is one of the most versatile clays available (sculpt, brush on, trowel on or pour) allowing for quick build-up and sculpting perfect detail. Use for sculpting finely detailed miniatures or life-size sculptures.

Reusable Storage Container STORE | MELT | POUR

The Alien Clay[™] container is specially designed for storing, melting and pouring the clay. It has two hand holds and pour spouts to allow you to pour liquified clay directly from the container.

Monster Clay®

Monster Clay® modelling clay is a reusable sulphur free, professional oil/wax based sculpting medium. Monster Clay® has an ultra smooth formulation that features a low melt temperature and a low tack feel that will not stick to tools or fingers.

Buff Body Water Based Clay

BVG DEMO d n Te

A smooth buff body clay ideal for large scale sculpture applications. Available in 25 kg blocks for ease of cutting.

Can also be used for pottery/ earthenware with a firing range between 1120°C - 1280°C.

Favoured by head TV/ Film Sculptor Bryn Court!

Steel Shim

Precision brand steel shim used in mould wall creation for brush on moulds.

Ken's Tools

Bentley Advanced Materials carries an assortment of sculpting tools that will help bring all your details to life. A must for fine work and efficiency.



entley advanced materials

ays & Sculpting Tools

The Finest Name in Modeling Clays

Sulfur-Free Fine Art Sculpting Clays

NSP[™] holds exceptional surface details and is somewhat waxier and tougher than other Chavant products. NSP[™] can be melted and poured at approximately 96°C.

Le Beau Touché[™] is an extremely smooth sculpting fine art plasteline with exceptional adhesive guality. The HTR formula is suggested for use where working environments are expected to reach 32°C.

Sculptex[™] is a non-drying modeling clay that is noncontaminating. It holds excellent detail and is great for precision sculpting, prototyping and model making.

Contour[™] brings all of the qualities of Sculptex[™] into a formula that can be melted and applied to a CNC foam armature by brush. Contour™ will not oxidize and can be left out or heated and cooled repeatedly without any significant change.

Prima Plastilina[™] is a premium-grade, smooth-working, oil-based modeling clay that never hardens or changes with air exposure. It has a medium tackiness with a neutral, non-offensive odour and a natural tan colour.

Jolly King[™] Plasteline offers the finest quality in an economical plasteline. The wax base, which is used in more costly plastelines, produces a smooth, pliable, non-drying modeling material.

Castilene[™] models like clay and works like wax. It is lightweight, compatible with silicones and other rubbers, and can be melted and poured at about 82°C.

Fill-It[™] is a non-drying, wax-based clay with excellent adhesive and feathering characteristics. It is used by mould makers to seal mould boxes, build dams, set parting lines/shims and repair cracks.

Sulfur-Based Modeling Clays

Roma Plastilina[™] sulfur-based modeling clay has been used by fine art sculptors since the 1950's.

Professional Plasteline[™] is a superior, sulfur based, silky smooth modeling clay. The material is soft, permanently pliable, reusable and requires no heating.

Formulated in the 1920's. **DaVinci**[™] is an original Italian Plastilina. Normal temperature ranges do not affect this unique, wax-free, sculpting clay which has a non-sticky, smooth feel.

Industrial Design

Modeling clay remains an industry standard for three-dimensional design studies. The material perfectly complements modern CAD-CAM processes and allows for quick surface modifications.



AUTOSTYLE & Y2 Klav are sulfur free. lightweight, low odour, and deaired.

CM-50, J-525 & CM-70 are sulfur based, hard, and available as deaired or non-deaired.

Ballistics Clay



was established as a ballistic testing clay in 1977. Since then, it has been adopted by military and law enforcement agencies for evaluating body armour and

helmets throughout the world. The clay is reliable, reusable and easy to use.

ROMA PLASTILINA[™] No. 1 is specified by National Institute of Justice (NIJ) Standard 0101.07 and ASTM E3004 for ballistics testing.

Paint

Maker Pro Paint

laker Pi Paínt

ADHESI

PROMOT

Maker Pro Paínt

Extreme Adhesion & Durability

Maker Pro Paints[™] are industrial-grade, professional scenic design paints developed for rigorous themed environment applications at amusement parks, zoos, aquariums, etc., where outdoor durability is critical. They are also suitable for various indoor rigid and flexible surface painting application projects - such as model prototyping and costuming.

> Maker Pro Paint™

Brand "X"

When used with the **Adhesion Promoter**, they will bond tenaciously to various rigid substrates. When mixed with the **FLEX Additive**, they will become more elastic and bond to flexible or semi-rigid substrates. **Maker Pro Paints™** can be applied by brush, roller, airbrush, spray gun, or touch-up gun.

Advantages:

- Water Based Low VOC's
 - UV Resistant
- Highly Scratch Resistant
- Tenacious Bonding to Both Rigid and Flexible Surfaces Preparation is Important -Adhesion Promoter & Flex Additive

ter Pro Paín

CKIE

ETALLICS

ORESCENT

Standard Colour Collection





Masters of the Universe[®] Castle Grayskull[®] created for Mattel Adventure Park (Arizona). Fabricated by Daniel's Woodland. dwlstudios.com

OV0

ADVENTURI

OPENING



entley advanced materials

How-To Seminars

Mould Making & Casting

Using slides, video and hands-on demonstration, you will learn what these materials can do for you:



- Different Materials Available for Making Moulds
- Different Mould Making Techniques
- Once You Have Your Mould, What Can You Pour Into It To Make a Copy
- Casting Options Make Your Plastic Castings Look Like Metal, Wood, Stone & More!
- Secrets to Being Successful in Using These Materials

Making a rubber mould of an original model allows you to make one or more perfect reproductions of that original. Moulds are used daily for hundreds of applications including:

- Reproducing Sculpture
- Casting Plaster
- Candle Making
- Casting Wax
- Casting Concrete
- Casting Resins
- Architectural Restoration
- Toy Making
- Casting Foams
- Prototype Model Making
- Taxidermy
- Movie Special Effects
- Life Casting
 - . . And Much More!

Bentley Workshops

We provide various in store events and hands-on workshops. Learn the ins and outs of mould making, props, prototyping, special effects make-up and so much more.

Workshops Include:

LifeCasting Techniques
 Prosthetic Wound Making
 Eye Making Workshop
 And More!

Seminars & Workshops Are Held Regularly at Each Location Ŋ

(1) (1)

ב כ ס

Condensation Cure Silicone Rubber

06

86

Cor	٦C	le	er	19	38	ai	ti	C	or	ו	C	ι	J٢	•6	2	S	Silicone Rubb	е	ł
colont	Light Pink	Translucent	White	Translucent	Light Pink	Purple	Translucent	Yellow	Pink	Blue	Mint Green	Red	White	Light Blue	Lavender	Light Pink	***0103	Beige/Colourless	Beine/Colourless
POWIC	0.001	0.0025	0.002	0.002	0.001	0.001	0.002	0.002	0.002	0.001	0.004	0.0015	0.002	0.0025	0.0025	0.003	0%) 51 - 100 - 10	<0.7	<0.7
° Yealar 1013e6u013 19 0 W 1	529%	586%	600%	600%	512%	375%	400%	361%	300%	375%	250%	132%	300%	250%	250%	250%		400%	400%
1917 - 10-10 Die B Legi Die B Legi	100 pli	87 pli	87 pli	94 pli	110 pli	130 pli	110 pli	96 pli	125 pli	110 pli	120 pli	63 pli	125 pli	40 pli	40 pli	85 pli	HEUGINGUE	15	15
Chuje Noinue Specific N D-5	24.1	25.4	24.7	25.6	23.5	23.5	25.0	23.7	23.5	22.7	24.3	19.1	23.5	20.6	20.6	21.3	SSD. SSD.	3.5	3.5
Shore A Shore A Shore A	10A	10A	14A	15A	20A	25A	27A	29A	30A	30A	40A	60A	30A	25A	30A	40A	(Shore Harding Shore Harding Shore hunder	22A	22A
CUre Finne	24 hrs.	24 hrs.	4 hrs.	24 hrs.	24 hrs.	24 hrs.	24 hrs.	6 hrs.	24 hrs.	24 hrs.	24 hrs.	24 hrs.	16 hrs.	75 min.	6 hrs.	30 min.		24 hrs.	6 hrs.
VISW PSIN	45 min.	45 min.	40 min.	45 min.	45 min.	60 min.	45 min.	40 min.	45 min.	40 min.	45 min.	40 min.	30-45 min.	15 min.	30 min.	3-5 min.	voidde 53°5° 100 rtike ×oidde 55°50° 55°50°	120 min.	60 min.
VIXEQ NIXEQ	15 000	14 000	7 500	20 000	25 000	25 000	30 000	10 000	25 000	30 000	45 000	20 000	Brushable	4 250	4 250	Putty	مناب ² و دمی در بابه برابه مرابع	30 000	30 000
A:B Mix Ratio	100:10 pbw	100:10 pbw	100:10 pbw	100:10 pbw	100:10 pbw	100:5 pbw	100:10 pbw	100:10 pbw	100:10 pbw	100:10 pbw	100:10 pbw	100:3 pbw	100:10 pbw	1:1 pbv	1:1 pbv	20:1 pbv	8:4 8:4	100:5 pbw	100:5 pbw
Product Name	Mold Max TM 10	Mold Max TM 10T	Mold Max TM 14NV	Mold Max TM 15T	Mold Max TM 20	Mold Max TM 25	Mold Max TM 27T	Mold Max TM 29NV	Mold Max TM 30	Mold Max TM XLS TM II	Mold Max TM 40	Mold Max TM 60	Mold Max TM STROKE TM	OOMOOTM 25	OOMOOTM 30	PoYo TM Putty 40	Product Name	RTV 3322/CATA 24H	RTV 3322/CATA 6H

Colone	<0.7 Beige/Colourles	<0.7 Beige/Colourles:	<0.7 White/Colourles:	<0.7 White/Colourles:	<0.7 Green/White	<0.7 Green/White
LACING CALL	400%	400%	450%	440%	440%	400%
4164941 (Kolode Street	15	15	21	26	26	15
Lense Streps	3.5	3.5	4.0	4.2	4.2	3.5
Shore Harde	22A	22A	25A	28A	25A	22A
Demoniques	24 hrs.	6 hrs.	24 hrs.	6 hrs.	2 hrs.	2 hrs.
6153°C' 20° © 53°C' 20° © 53°C' 20° © 53°C' 20° Del 18°C' 20°	120 min.	60 min.	90-150 min.	20-60 min.	15 min.	15 min.
14:50,55 14:5005 14:5005 11	30 000	30 000	35 000	35 000	30 000	30 000
e:A Mix Patio	100:5 pbw	100:5 pbw	100:5 pbw	100:5 pbw	100:5 pbw	100:5 pbw
Product Name	RTV 3322/CATA 24H	RTV 3322/CATA 6H	RTV 3325/CATA 24H	RTV 3325/CATA 6H	RTV 3325 2H CAT	RTV 3322 2H CAT

Addition Cure Silicone Rubber

0/1e,

Product Name	×. •		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	دم مح م	\$¥\$ 	00 54 54 54	2007	54 AS / E/	45 54 70	03 \ (43)
Body Double TM Standard Set	1:1 pbv	Brushable	5 min.	20 min.	25A	23.7	N/A	500%	<0.001	Purple
Body Double TM Fast Set	1:1 pbv	Brushable	90 sec.	7 min.	25A	23.7	N/A	500%	<0.001	Aqua Green
Body Double TM SILK	1:1 pbv	Brushable	6 min.	20 min.	25A	30.4	N/A	N/A	<0.001	Green
Dragon Skin [™] FX-Pro	1:1 pbv	18 000 cps	12 min.	40 min.	2A	25.0	61 pli	763%	<0.001	Translucent
Dragon Skin TM 10 Very Fast	1:1 pbv	23 000 cps	4 min.	30 min.	10A	25.8	102 pli	1000%	<0.001	Translucent
Dragon Skin TM 10 Fast	1:1 pbv	23 000 cps	8 min.	75 min.	10A	25.8	102 pli	1000%	<0.001	Translucent
Dragon Skin TM 10 Medium	1:1 pbv	23 000 cps	20 min.	5 hrs.	10A	25.8	102 pli	1000%	<0.001	Translucent
Dragon Skin TM 10 Slow	1:1 pbv	23 000 cps	45 min.	7 hrs.	10A	25.8	102 pli	1000%	<0.001	Translucent
Dragon Skin TM 10 NV	1:1 pbv	6 000 cps	15 min.	75 min.	10A	25.8	90 pli	663%	<0.001	Water White Translucent
Dragon Skin TM 10 AF	1:1 pbv	23 000 cps	20 min.	5 hrs.	10A	25.8	102 pli	1000%	<0.001	Translucent
Dragon Skin TM 15	1:1 pbv	21 000 cps	40 min.	7 hrs.	15A	25.8	112 pli	771%	<0.001	Translucent
Dragon Skin TM 20	1:1 pbv	20 000 cps	25 min.	4 hrs.	20A	25.6	120 pli	620%	<0.001	Translucent
Dragon Skin TM 30	1:1 pbv	20 000 cps	45 min.	16 hrs.	30A	25.7	108 pli	364%	<0.001	Translucent
Ecoflex TM Gel	1:1 pbv	9 300 cps	15 min.	2 hrs.	000-35	28.0	N/A	1000%	<0.001	Translucent
Ecoflex TM Gel 2	1:1 pbv	5 000 cps	20 min.	50 min.	000-34	26.4	N/A	1000%	<0.001	Translucent
Ecoflex TM 00-10	1:1 pbv	14 000 cps	30 min.	4 hrs.	00-10	26.6	22 pli	800%	<0.001	Translucent
Ecoflex TM 00-20	1:1 pbv	3 000 cps	30 min.	4 hrs.	00-20	26.0	30 pli	845%	<0.001	Translucent
Ecoflex TM 00-20 FAST	1:1 pbv	3 000 cps	20 min.	1 hr.	00-20	26.0	30 pli	845%	<0.001	Translucent
Ecoflex TM 00-30	1:1 pbv	3 000 cps	45 min.	4 hrs.	00-30	26.0	38 pli	%006	<0.001	Translucent
Ecoflex TM 00-31 Near Clear TM	1:1 pbv	3 000 cps	40 min.	4 hrs.	00-31	26.0	38 pli	%006	<0.001	Water Clear Translucent
Ecoflex TM 00-33 AF	1:1 pbv	3 000 cps	45 min.	4 hrs.	00-33	26.0	38 pli	%006	<0.001	Off-White Translucent
Ecoflex TM 00-35 FAST	1:1 pbv	3 500 cps	2.5 min.	5 min.	00-35	26.0	38 pli	%006	<0.001	Off-White Translucent
Ecoflex TM 00-45 Near Clear TM	1:1 pbv	2 000 cps	45 min.	4 hrs.	00-45	26.2	50 pli	980%	<0.001	Water Clear Translucent
Ecoflex TM 00-50	1:1 pbv	8 000 cps	18 min.	3 hrs.	00-50	25.9	50 pli	980%	<0.001	Translucent
Ecoflex TM 5 (Cartridge Only)	1:1 pbv	13 000 cps	1 min.	5 min.	5A	25.8	75 pli	1000%	<0.001	Translucent
Encapso TM K	1:1 pbv	150 cps	120 min.	16 hrs.	33A	28.6	N/A	N/A	<0.001	Clear
Equinox TM 35 FAST	1:1 pbv	Putty	1 min.	7 min.	35A	22.2	140 pli	430%	0.001	Light Purple
Equinox TM 38 MEDIUM	1:1 pbv	Putty	4 min.	30 min.	38A	22.2	140 pli	430%	0.001	Light Purple
Equinox TM 40 SLOW	1:1 pbv	Putty	30 min.	5 hrs.	40A	22.2	140 pli	430%	0.001	Light Purple
EZ~Brush [™] Vac Bag Silicone	1:1 pbv	20 000 cps	30 min.	3.5 hrs.	20A	25.7	102 pli	364%	<0.001	Translucent Green
EZ~Spray TM Silicone 20	1:1 pbv	11 000 cps	3 min.	20 min.	20A	25.6	100 pli	470%	<0.001	Translucent Green
EZ~Spray TM Silicone 22	1:1 pbv	11 000 cps	5 min.	45 min.	22A	25.6	102 pli	450%	<0.001	Translucent Green
EZ~Spray TM 35	1:1 pbv	Sprayable	1.5 min.	1 hr.	35A	24.1	92 pli	415%	<0.001	Purple
Mold Star TM 14T	1:1 pbv	11 000 cps	3 min.	9 min.	14A	25.6	90 pli	490%	<0.001	Translucent
Mold Star TM 15 SLOW	1:1 pbv	12 500 cps	50 min.	4 hrs.	15A	23.5	88 pli	440%	<0.001	Green
Mold Star TM 16 FAST	1:1 pbv	12 500 cps	6 min.	30 min.	16A	23.5	88 pli	440%	<0.001	Blue-Green
Mold Star TM 19T	1:1 pbv	11 000 cps	3 min.	12 min.	19A	25.6	90 pli	470%	<0.001	Translucent
Mold Star TM 20T	1:1 pbv	11 000 cps	6 min.	30 min.	20A	25.6	90 pli	470%	<0.001	Translucent
Mold Star TM 30	1:1 pbv	12 500 cps	45 min.	6 hrs.	30A	24.7	88 pli	339%	<0.001	Blue
Mold Star TM 31T	1:1 pbv	11 000 cps	5 min.	23 min.	30A	25.6	90 pli	400%	<0.001	Translucent
Rebound TM 25	1:1 pbv	Brushable	20 min.	6 hrs.	25A	23.5	102 pli	690%	<0.001	Orange
Rebound TM 40	1:1 pbv	Brushable	20 min.	6 hrs.	40A	23.5	106 pli	324%	<0.001	Green

Addition Cure Silicone Rubber

Technical Charts

Addition Cure Silicone Rubber (cont'd)

	Product Name	**************************************	AISCOSIA AISCOSIA Pexim NIXEQ	421W 605 Tike W D-53	Conre l'inte	ASTA ASTORE A Shore A	Chui Noinue Specific N D-55	V22 2 freu∂ft Die B Legr Die B Legr . 11. (19.)	% Yeəilə 40,3e0 19,9e0 19,9 10,0 10,0 10,0 10,0 10,0 10,0 10,	(11/11) 2441145 2441145	^{sno_loologie}
	Rubber Glass TM	1:1 pbv	150 cps	120 min.	16 hrs.	33A	28.6	N/A	N/A	<0.001	Clear
	Smooth-Sil TM 933 Flame Out TM	1:1 pbv	40 000 cps	45 mins.	6 hrs.	33A	19.5	50 pli	433%	<0.001	White
	Smooth-Sil TM 936	100:10 pbw	21 000 cps	60 min.	24 hrs.	36A	22.9	110 pli	500%	<0.001	Blue
u	Smooth-Sil TM 940	100:10 pbw	35 000 cps	30 min.	24 hrs.	40A	23.4	100 pli	300%	<0.001	Pink
0-	Smooth-Sil TM 945	1:1 pbv	30 000 cps	25 min.	6 hrs.	45A	22.3	120 pli	320%	<0.001	Purple
un	Smooth-Sil TM 950	100:10 pbw	35 000 cps	45 min.	18 hrs.	50A	22.3	155 pli	320%	<0.001	Blue
00	Smooth-Sil TM 960	100:10 pbw	30 000 cps	45 min.	16 hrs.	60A	22.2	110 pli	270%	<0.001	Green
u	Solaris TM Clear Encapsulant	1:1 pbv	1 200 cps	240 min.	24 hrs.	15A	28.1	N/A	290%	<0.001	Clear
S	SORTA-Clear TM 12	1:1 pbv	6 000 cps	40 min.	12 hrs.	12A	25.9	80 pli	590%	<0.001	Water Clear
	SORTA-Clear TM 18	100:10 pbw	21 000 cps	60 min.	24 hrs.	18A	25.6	80 pli	545%	<0.001	Translucent
	SORTA-Clear TM 37	1:1 pbv	35 000 cps	25 min.	4 hrs.	37A	25.6	105 pli	400%	<0.001	Translucent
	SORTA-Clear TM 40	100:10 pbw	35 000 cps	60 min.	16 hrs.	40A	25.6	120 pli	400%	<0.001	Translucent
1											



Urethane Rubber

0

		0ļ1e	A4150	11 0 - 5 11 0 - 5 11 0 - 5 ³		5504 5 V 6	16 111 111 110 10 10	4460 1831 8 191/10	% Yes uo;iel 29-0 J	abey	45
		8:4 8:4	A S S S S S S S S S S S S S S S S S S S	N154 7300	EL® CALE	VIST AS	nj njon Dads	Die E		"/41) 4145	^{20/0} 3
	Brush-On TM 35	1:1 pbv	Brushable	20 min.	16 hrs.	35A	21.5	57 pli	1000%	<0.001	Grey-Green
	Brush-On TM 40	1:1 pbv	Brushable	20 min.	16 hrs.	40A	23.7	60 pli	1000%	<0.001	Off-White
	Brush-On TM 50	1:1 pbv	Brushable	20 min.	16 hrs.	50A	23.7	80 pli	400%	<0.001	Off-White
	Brush-On TM 60	1:1 pbv	Brushable	20 min.	16 hrs.	60A	23.5	80 pli	400%	<0.001	Off-White
	Clear Flex TM 30	1:1 pbv	750 cps	15 min.	16 hrs.	30A	26.9	54 pli	675%	0.002	Clear
	Clear Flex TM 50	1:2 pbw	250 cps	25 min.	16 hrs.	50A	26.8	25 pli	500%	0.0015	Clear
	Clear Flex TM 95	1:1.5 pbw	250 cps	25 min.	16 hrs.	95A	26.8	200 pli	175%	0.0028	Clear
	Econ TM 60	1:1 pbv	1 400 cps	6 min.	16 hrs.	60A	26.7	85 pli	500%	<0.001	Amber Translucent
	Econ TM 80	1:1 pbv	1 200 cps	13 min.	24 hrs.	80A	26.2	77 pli	127%	0.0014	Translucent
	EZ-Mix TM 40	1:1 pbv	Brushable	18 min.	16 hrs.	40A	27.0	67 pli	577%	<0.001	Grey
	EZ~Spray™ 45	1:1 pbv	Sprayable	20 min.	16 hrs.	45A	27.0	100 pli	375%	<0.001	Light Blue
	Formlastic TM 48	1:1 pbv	3000 cps	25 min.	24 hrs.	48A	24.3	98 pli	1250%	0.001	Off-White
	Formlastic TM 60	1:1 pbv	3000 cps	40 min.	24 hrs.	60A	24.3	146 pli	1000%	0.001	Off-White
	KX Flex TM 40	1:1 pbv	800 cps	2.5 min.	24 hrs.	40A	25.9	N/A	400%	0.002	Off-White
	KX Flex TM 60	1:1 pbv	800 cps	2.5 min.	24 hrs.	60A	24.1	N/A	125%	0.005	Off-White
ι	KX Flex TM 90	100A:120B pbw	800 cps	2.5 min.	24 hrs.	90A	24.1	N/A	125%	0.005	Off-White
0	PMC ^{TM-121/30}	1:1 pbv	1 800 cps	30 min.	16 hrs.	30A	26.7	75 pli	1000%	<0.001	Clear Amber
-uı	PMC ^{TM-121/50}	1:1 pbv	1 400 cps	30 min.	16 hrs.	50A	26.7	85 pli	500%	<0.001	Clear Amber
00	PMC TM -724	1:10 pbw	4 000 cps	20 min.	16 hrs.	40A	20.1	90 pli	%002	<0.001	Off-White
Ju	PMC TM -726	1:10 pbw	3 000 cps	25 min.	16 hrs.	60A	20.4	100 pli	400%	<0.001	Light Tan
S	PMC TM -744	2:1 pbv	3 400 cps	15 min.	16 hrs.	44A	27.5	90 pli	400%	<0.001	Beige
	PMC TM -746	2:1 pbv	1 200 cps	15 min.	16 hrs.	60A	26.9	100 pli	650%	<0.001	Amber to Blue
	PMC TM -770	2:1 pbw	3 000 cps	30 min.	16 hrs.	70A	26.5	200 pli	750%	<0.001	Light Amber
	PMC TM -780	2:1 pbv	2 000 cps	25 min.	48 hrs.	80A	27.2	200 pli	750%	<0.001	Light Amber
	PMC TM -790	2:1 pbv	3 000 cps	20 min.	48 hrs.	90A	25.9	300 pli	550%	<0.001	Clear Amber
	ReoFlex TM 20	1:1 pbv	1 800 cps	30 min.	16 hrs.	20A	27.3	60 pli	1000%	<0.001	Off-White
	ReoFlex TM 30	1:1 pbv	1 500 cps	30 min.	16 hrs.	30A	27.5	82 pli	1000%	<0.001	Off-White
	ReoFlex TM 40	1:1 pbv	1 500 cps	30 min.	16 hrs.	40A	27.2	85 pli	1000%	<0.001	Off-White
	ReoFlex TM 50	1:1 pbv	2 000 cps	50 min.	16 hrs.	50A	27.4	120 pli	435%	<0.001	Off-White
	ReoFlex TM 60	1:1 pbv	1 800 cps	50 min.	16 hrs.	60A	26.7	132 pli	581%	<0.001	Off-White
	VytaFlex TM 10	1:1 pbv	3 100 cps	30 min.	24 hrs.	10A	27.9	38 pli	1000%	<0.001	Off-White
	VytaFlex TM 20	1:1 pbv	1 000 cps	30 min.	16 hrs.	20A	27.7	60 pli	1000%	<0.001	Clear Amber
	VytaFlex TM 30	1:1 pbv	1 800 cps	30 min.	16 hrs.	30A	27.3	78 pli	1000%	<0.001	Off-White
	VytaFlex TM 40	1:1 pbv	2 000 cps	30 min.	16 hrs.	40A	26.9	82 pli	660%	<0.001	Off-White
	VytaFlex TM 45	1:1 pbv	2 000 cps	30 min.	16 hrs.	45A	26.4	100 pli	%006	<0.001	Off-White
	VytaFlex TM 50	1:1 pbv	2 000 cps	60 min.	16 hrs.	50A	26.7	102 pli	400%	<0.001	Off-White
	VytaFlex TM 60	1:1 pbv	2 000 cps	60 min.	16 hrs.	60A	26.6	136 pli	480%	<0.001	Off-White

Urethane Rubber

Technical Charts

Urethane Plastic

Urethane Plastic

				ZE6E0	1200	ی د ک	ېړد	101 5540		° 4 9, 8€	* 4)	(41/1) (41/1)
	Product Name	A:B Mix Patio	Mixed Vis	BOF LIFE		Cure Ling	Verianese Hardnese Shore D	Solution of the second			PEEYUIJUS	colont
	Crystal Clear TM 200	100:90 pbw	600 cps	20 min.		16 hrs.	80D	26.7	2 500 psi	10%	0.001	Clear
	Crystal Clear TM 202	100:90 pbw	600 cps	9 min.	ı	90 min.	80D	26.7	3 500 psi	10%	0.0125	Clear
	Crystal Clear TM 204	100:90 pbw	600 cps	2 hrs.	ı	48 hrs.	80D	26.7	3 500 psi	10%	0.002	Clear
	Crystal Clear TM 206	100:90 pbw	600 cps	4.5 hrs.	ı	7 days	80D	26.7	2 500 psi	10%	0.002	Clear
	Crystal Clear TM 220	100:75 pbw	675 cps	22 min.	ı	overnight	85D	25.9	8 190 psi	12%	0.0173	Clear
	Crystal Clear TM 221	100:75 pbw	675 cps	75 min.	ı	overnight	85D	25.9	8 190 psi	12%	0.0173	Clear
	Crystal Clear™ 222 MF	100:75 pbw	800 cps	20 min.	ı	16 hrs	83D	25.9	8 990 psi	6.3%	0.0135	Clear
	EZ~Spray TM StyroCoat TM	1:1 pbv	Variable	2 sec.	ı	60 min.	80D	24.7	3 170 psi	20%	0.015	Off-White
	EZ~Spray TM Plastic	1:1 pbv	Variable	2 sec.	ı	3 hrs.	75D	25.0	2 650 psi	10%	0.016	Off-White
	Feather Lite TM	1:1 pbv	410 cps	8.5 min.	ı	2 hrs.	58D	41.3	2 160 psi	1.6%	0.003	Beige
	Plasti-Paste TM	1:3 pbv	Paste	8-10 min.	90 min	24 hrs.	70D	23.9	1 600 psi	1.5%	0.005	Off-White
	Plasti-Paste TM II	1:2 pbv	Paste	10 min.	90 min.	24 hrs.	70D	27.73	2 150 psi	1.14%	0.005	Off-White
	Shell Shock TM Fast	1:4 pbv	3 000 cps	3 min	I	60 min.	85D	17.3	3 100 psi	0.4%	0.0006	Beige
	Shell Shock TM Slow	1:4 pbv	3 000 cps	8 min		5 hrs.	85D	17.3	3 100 psi	0.4%	0.0006	Beige
	Simpact TM 60A	1:1 pbv	1 100 cps	4 min.	2 hrs.	48 hrs.	60A	25.7	990 psi	400%	0.007	White
	Simpact TM 80A	100:60 pbw	2 000 cps	15 min.	4 hrs.	48 hrs.	80A	25.4	2 295 psi	164%	0.007	Amber
u	Simpact TM 85A	85:100 pbw	1 100 cps	4 min.	2 hrs.	48 hrs.	85A	25.4	1 573 psi	164%	0.007	Off-White
0-	SMASH! TM Plastic	1:1 pbv	900 cps	5 min.	90 min.	16 hrs.	80D	26.7	N/A	N/A	0.0001	Clear
цį	Smooth-Cast TM 45D	1:1 pbv	250 cps	5 min.	ı	30 min.	45D	25.2	1 560 psi	100%	0.007	Translucent White
00	Smooth-Cast TM 57D	1:1 pbv	300 cps	3 min.	ı	30 min.	57D	26.4	2 420 psi	100%	0.012	Translucent White
ພູ	Smooth-Cast TM 60D	1:1 pbv	430 cps	5 min.	1	30 min.	60D	26.4	2 420 psi	100%	0.012	Translucent White
S	Smooth-Cast TM 61D	1:1 pbv	430 cps	7 min.	ı	60 min.	61D	26.4	2 420 psi	100%	0.012	Translucent White
	Smooth-Cast TM 65D	1:1 pbv	120 cps	2.5 min.	ı	10-15 min.	65D	26.4	2 400 psi	20%	0.01	White
	Smooth-Cast TM 66D	1:1 pbv	120 cps	7 min.		60 min.	66D	26.4	2 400 psi	20%	0.01	Grey
	Smooth-Cast TM 300Q	1:1 pbv	80 cps	30 sec.	ı	4-5 min.	70D	26.4	3 000 psi	5%	0.01	White
	Smooth-Cast TM 300	1:1 pbv	80 cps	3 min.	ı	10 min.	70D	26.4	3 000 psi	5%	0.01	White
	Smooth-Cast TM 305	1:1 pbv	80 cps	7 min.	ı	30 min.	70D	26.4	3 000 psi	7.5%	0.0065	White
	Smooth-Cast TM 310	1:1 pbv	80 cps	15-20 min.	ı	3-4 hrs.	70D	26.4	3 000 psi	7.5%	0.0065	White
	Smooth-Cast TM 320	1:1 pbv	80 cps	3 min.	ı	10 min.	70D	26.4	3 000 psi	10%	0.01	Off-White
	Smooth-Cast TM 321	1:1 pbv	80 cps	7-9 min.	ı	30 min.	70D	26.4	3 000 psi	8%	0.007	Off-White
	Smooth-Cast TM 322	1:1 pbv	80 cps	10-20 min.		2-4 hrs.	70D	26.4	3 000 psi	8%	0.007	Off-White
	Smooth-Cast TM 325	1:1 pbv	100 cps	2.5 min.	ı	10 min.	72D	25.9	3 170 psi	10%	0.01	Clear Amber
	Smooth-Cast TM 326	1:1 pbv	100 cps	7-9 min.	ı	60 min.	72D	25.9	3 170 psi	10%	0.0075	Clear Amber
	Smooth-Cast TM 327	1:1 pbv	100 cps	10-20 min.	ı	2-4 hrs.	72D	25.9	3 170 psi	10%	0.0075	Clear Amber
	Smooth-Cast TM ONYX TM FAST	1:1 pbv	100 cps	2.5 min.	,	10-15 min.	80D	27.7	5 840 psi	4%	0.01	Black
	Smooth-Cast TM ONYX TM SLOW	1:1 pbv	100 cps	5 min.	,	90 min.	80D	27.7	7 660 psi	3%	0.012	Black
	Smooth-Cast TM 380	1:1 pbv	1 140 cps	6 min.	1	60 min.	82D	15.9	3 550 psi	1.43%	0.0025	Tan
	Smooth-Cast TM 385	1:5 pbw	3 000 cps	20 min.	ı	2 hrs.	85D	17.3	3 100 psi	1%	0.0006	Beige

Urethane Plastic (cont'd)

(cont	'c	;]])										1		1
¹ no _{lo} o 0 0 0 0 0 0 0	White	White	lvory	Tan	Tan	White	Off-White	Clear Amber	Translucent White	Black	Black	Opaque White	Light Yellow	Metal Gray	White
VLSV Shinks 869-0 WLSV 869-0 WLSV 869-0	0.005	0.0025	0.0035	0.007	0.0031	0.0111	0.01	0.009	0.0024	0.005	0.0035	0.0042	0.0025	0.0006	0.0058
Elongerion	6%	6%	4%	5%	4%	15.1%	4%	6%	100%	125%	125%	20%	233%	1%	7.5%
	6 650 psi	6 650 psi	6 500 psi	4 530 psi	5 200 psi	3 390 psi	5 840 psi	7 800 psi	2 500 psi	1 800 psi	1 800 psi	2 720 psi	2 264 psi	3 250 psi	5 500 psi
Chi II Ch	24.7	24.7	23.9	25.2	25.9	23.1	25.4	24.3	24.7	24.1	24.1	24.7	25.6	17.6	25.9
	80D	80D	83D	77D	75D	73D	80D	85D	60D	50D	50D	75D	30D	88D	75D
Cnie Line Cnie Line Cone Line Cone Lizzo	60 min.	90 min.	16 hrs.	24 hrs.	24 hrs.	10 min.	10-15 min.	60 min.	16 hrs.	20 min.	45 min.	60 min.	24 hrs.	16 hrs.	60 min.
© 23 Line Handling L1 D-2477	,			15 min.	75 min.								90 min.	·	
421W 421W 504 Tile 566625	7 min.	20 min.	20 min.	3 min.	7 min.	2.5 min.	2.5 min.	7 min.	20 min.	3 min.	10 min.	6 min.	6 min	20 min.	6 min.
isoosin pasiw	150 cps	150 cps	250 cps	600 cps	800 cps	200 cps	100 cps	300 cps	2 000 cps	800 cps	800 cps	600 cps	1 400 cps	4 400 cps	500 cps
A:A 4:A 4:A	1:1 pbv	1:1 pbv	100:100 pbw	1:1 pbv	1:1 pbv	1:1 pbv	1:1 pbv	1:1 pbv	100:100 pbw	100:120 pbw	100:120 pbw	75:100 pbw	1:2 pbw	26:100 pbw	2:1 pbv
Product Name	TASKTM 2	FASKTM 3	FASKTM 4	FASK TM 5	FASK TM 6	FASK TM 7 Flame Out TM	TASK TM 8	FASK TM 9	FASK TM 11	FASKTM 13	FASKTM 14	TASK TM 15	FASK TM 16	FASK TM 18	FASK TM 21
	U17	-				1		1	1	1	1.2	1	1	1	-

Ξ

Urethane Foam

		-					9				-			_)										
-1nc	°‰3	Beige	Beige	Black	Beige	Off White	Beige	Beige	Beige	White	Tan	White	White	White	White	White	White	White	White	White	White	White	White	White
	, 	3 lb/ft3	4 lb/ft3	4 lb/ft3	5 lb/ft3	8 lb/ft3	10 lb/ft3	10 lb/ft3	15 lb/ft3	26 lb/ft3	8 lb/ft3	3 lb/ft3	5 lb/ft3	5 lb/ft3	5 lb/ft3	7 lb/ft3	8 lb/ft3	10 lb/ft3	14 lb/ft3	15 lb/ft3	17 lb/ft3	23 lb/ft3	25 lb/ft3	7 lb/ft3
		18 times	14 times	14 times	10 times	8 times	6 times	6 times	4 times	2 times	7 times	15 times	13 times	11 times	10 times	8 times	8 times	6 times	4 times	4 times	3.5 times	2 times	2 times	7 times
	noj ziele	504	420	420	315	194	157	157	105	60	144	504	420	315	280	229	194	157	114	115	93	68	63	252
P100	Den	2 hrs.	2 hrs.	2 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs.	2 hrs.	2 hrs.	10 min.	2 hrs.	2 hrs.	2 hrs.	2 hrs.	2 hrs.	2 hrs.	2 hrs.	2 hrs.	4 hrs	2 hrs.	2 hrs.	2 hrs.	15 min
Bulling	Hand	20 min.	20 min.	20 min.	20 min.	20 min.	20 min.	1 hr.	20 min.	20 min.	10 min.	25 min.	45 min.	45 min.	60 min.	60 min.	25 min.	45 min.	45 min.	90 min	30 min.	60 min.	25 min.	10 min
5.0 11.0 665-0 10	ASP 10	1 min.	1.5 min.	1.5 min.	1.5 min.	1.5 min.	1.5 min.	3.5 min.	1.5 min.	1.5 min.	13 sec.	35 sec.	30 sec.	50 sec.	35 sec.	35 sec.	35 sec.	50 sec.	60 sec.	2 min	60 sec.	90 sec.	90 sec.	10 sec
14/50 Pa	Nixe Six	200 cps	300 cps	300 cps	300 cps	300 cps	400 cps	400 cps	500 cps	500 cps	400 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps	1 000 cps
o _{lite} u	8:4 XIM	1:1 pbv	1:1 pbv	1:1 pbv	1:1 pbv	2:1 pbw	1:1 pbv	1:1 pbv	1:1 pbv	1:1 pbv	1:1 pbv	1:2 pbv	80:100 pbw	1:1 pbv	1:1 pbv	1:1 pbv	1:2 pbv	1:1 pbv	1:2 pbv	1:2 pbv	1:2 pbv	85:100 pbw	1:2 pbw	vha 1-1
hane Foam	Product Name	FOAM-iTITM 3	FOAM-iTITM 4	FOAM-ITITM 4 BLACK	FOAM-iTITM 5	FOAM-iTI' TM 8	FOAM-iTITM 10	FOAM-iTITM 10 SLOW	FOAM-iT! TM 15	FOAM-iTITM 26	EZ~Spray™ Foam	FlexFoam-iT! TM III	FlexFoam-iTITM IV Tuff Stuff	FlexFoam-iT! TM V	FlexFoam-iTITM 6 Pillow Soft	FlexFoam-iTITM 7 FR	FlexFoam-iT!™ VIII Pillow Soft	FlexFoam-iT!™ X	FlexFoam-iTI TM 14	FlexFoam-iTITM 15 Tuff Stuff	FlexFoam-iTI TM 17	FlexFoam-iTITM 23 FR	FlexFoam-iTITM 25	E7~Sorav TM FlexFoam
, C						p	61	Н								ə	di)	ĸəļ	Ч					

Silicone Foam

White	White	
15 lb/ft3	25 lb/ft3	
4 times	2-3 times	
115	69	
1 hr.	1 hr.	
20 min.	20 min.	
30 sec.	90 sec.	
10 000 cps	10 000 cps	
2:1 pbv	1:1 pbv	
Soma Foama [™] 15	Soma Foama TM 25	



53

Castable Ш

Castable	Epoxies Product Name	EpoxAcast TM 650 101 Fast	EpoxAcast TM 650 102 Mediun	EpoxAcast TM 650 103 Slow	EpoxAcast TM 650 HT High Terr	EpoxAcast TM 650 BLACK 101 Fast	EpoxAcast TM 650 BLACK 102 Mediun	EpoxAcast TM 650 BLACK 103 Slow	EpoxAcast TM 650 BLACK HT High Terr	EpoxAcast TM 655 101 Fast	EpoxAcast TM 655 102 Mediun	EpoxAcast TM 655 103 Slow	EpoxAcast TM 655 HT HT High Terr	EpoxAcast TM 670 HT HIgh Terr	EpoxAcast TM 690 N/A	EpoxAcast TM 692 N/A
	2.14 E HIX HOULD	100A:12B pbw	100A:13B pbw	100A:14B pbw	100A:10B pbw	100A:12B pbw	100A:13B pbw	100A:14B pbw	100A:10B pbw	100A:10B pbw	100A:11B pbw	100A:12B pbw	100A:8B pbw	100A:16B pbw	100A:30B pbw	100A:40B pbw
	Nisoosin Paxin	7 000 cps	7 000 cps	7 000 cps	5 000 cps	7 000 cps	7 000 cps	7 000 cps	5 000 cps	23 000 cps	23 000 cps	23 000 cps	12 000 cps	6 000 cps	280 cps	370 cps
	entre all and a second	20 min.	90 min.	3.5 hrs.	3.0 hrs.	20 min.	90 min.	3.5 hrs.	3.0 hrs.	30 min.	75 min.	3.5 hrs.	4.0 hrs.	3.0 hrs.	5.0 hrs.	12 hrs
	Cure Lin	1.0 hr.	4.0 hrs.	24 hrs.	24 hrs.*	1.0 hr.	4.0 hrs.	24 hrs.	24 hrs.*	3.0 hrs.	9.0 hrs.	24 hrs.	24 hrs.*	24 hrs.*	24 hrs.	72 hrs.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(Barcones)	93B	93B	93B	93B	93B	93B	93B	93B	00D	00D	00D	00D	00D	80D	80D
ייכ (SEC	Lield Viend Volumet	18.22	18.22	18.22	18.22	18.22	18.22	18.22	18.22	16.7	16.7	16.7	16.5	24.1	25.0	25.7
('9)		6 000 psi	6 000 psi	6 000 psi	6 900 psi	6 000 psi	6 000 psi	6 000 psi	6 900 psi	4 810 psi	4 810 psi	4 810 psi	6 000 psi	4 500 psi	6 630 psi	4 585 psi
885		0.42%	0.42%	0.42%	0.82%	0.42%	0.42%	0.42%	0.82%	0.54%	0.54%	0.54%	0.50%	0.65%	1.8%	3.1%
⁹ <i>N</i> / <i>S</i> ⁶ 865 94	Compression	16 350 psi	16 350 psi	16 350 psi	15 980 psi	16 350 psi	16 350 psi	16 350 psi	15 980 psi	12 500 psi	12 500 psi	12 500 psi	15 700 psi	13 000 psi	9 610 psi	5 777 psi
	Compression	142 600 psi	142 600 psi	142 600 psi	134 400 psi	142 600 psi	142 600 psi	142 600 psi	134 400 psi	125 500 psi	125 500 psi	125 500 psi	270 000 psi	101 400 psi	91 300 psi	82 000 psi
		Off-White	Off-White	Off-White	Off-White	Black	Black	Black	Black	Grey	Grey	Grey	Grey	Beige	Clear	Clear

### Laminating & Coating Epox

coating Epoxies	o ^{ijj} eti	14/50, Þé	۲ <i>بل</i> و ۲	נוגע גוע	e e V	ssaup		^{10,4} e6, ³ 11,5 91/:	Inc	
Product Name	X!W 8:4	sin Nix	30d		Carter	945) 145) 1841	Sol Cu.	Le ELO	‰ ₃	
EpoxAmite TM 101 FAST	4:1 pbv	1 000 cps	11 min.	30 min.	6-8 hrs.	84D	24.5	2.45%	Clear Yellow	
EpoxAmite TM 102 MEDIUM	3:1 pbv	650 cps	22 min.	90 min.	10-15 hrs.	80D	25.0	3.15%	Clear Yellow	
EpoxAmite TM 103 SLOW	3:1 pbv	650 cps	55 min.	180 min.	20-24 hrs.	80D	25.2	2.63%	Clear Yellow	
EpoxAmite TM HT	100A:33B pbw	650 cps	60 min.	180 min.	24 hrs.	80D	25.2	2.3%	Clear	
EpoxAmite TM White 101 FAST	100A:20B pbw	3 400 cps	20 min.	45 min.	10-15 hrs.	83D	22.2	0.8%	White	
EpoxAmite TM White 102 MEDIUM	100A:23B pbw	2 800 cps	62 min.	120 min.	20-24 hrs.	85D	22.5	1.2%	White	
EpoxAcoat TM RED/GREY/WHITE/NEUTRAL	5:1 pbv	Light Paste	20 min.	40 min.	16 hrs.	85D	19.4	N/A	Red Grey	
EpoxAcoat [™] HT	100A:188 pbw	Light Paste	40 min.	75 min.	4 hrs.*	85D	N/A	N/A	Dark Red	
EPSILON TM + 101 Hardener	100A:20B pbw	Variable	15 min.	45 min.	16 hrs.	75D	23.9	N/A	Beige	
EPSILON TM + 102 Hardener	100A:25B pbw	Variable	30 min.	120 min.	24 hrs.	75D	24.3	N/A	Beige	
Epsilon TM PRO	2:1 pbv	4 000 cps	22 min.	35 min.	16 hrs.	65D	25.0	N/A	Clear Amber	
Habitat Cast N Coat TM	1:1 pbv	13 500 cps	85 min	N/A	16 hrs.	85D	18.35	N/A	Tan	
Plasti-Paste TM Epoxy	2:1 pbv	Paste	40 min.	60 min.*	16 hrs.	80D	27.73	N/A	Off White	
Tarbender TM	2:1 pbv	1100 cps	45 min.	2 hrs.	16 hrs.	75D	25.4	N/A	Clear	
XTC-3D TM	2:1 pbv*	350 cps	10 min.*	20 min.	2 hrs.*	80D	25.1	N/A	Clear*	
							*See Te Informa	schnical Bulletin Fo	or More	

uO-dtoom2

### Epoxies

**Technical Charts** 

## Technical Charts

(con	nt	°C	:						
	20	Grey	Grey	Grey	Grey	Black	Neutral	Light Brown	Grey
SIM D. Q. 48)	ちょそ	140°F/60°C	145°F/63°C	140°F/60°C	400°F/204°C	160°F/74°C	160°F/74°C	160°F/74°C	N/A
	2) 27 25	61.6	61.6	34.6	54.31	17.3	17.3	17.9	20.73
Hore D Louises	\$) \$4	50D	60D	73D	55D	85D	85D	45D	80D
ILE LIVE	20 20	24 hrs.	24 hrs.	24 hrs.	16 hrs.	16 hrs.	16 hrs.	24 hrs.	24 hrs.
⁸ 4/7 ₂₀	م م	30 - 120 min.	6 - 10 min.	30 - 120 min.	150 min.	60 min.	90 min.	90 min.	1.5 hrs. @ 11b.
ixed Niscos		Dough	Dough	Dough	Dough	Dough	Dough	Dough	Putty
بر لا ^{عان} ه ۲	₩ *•►	1:1 pbv	1:1 pbv	1:1 pbv	2:1 pbv	1:1 pbv	1:1 pbv	1:1 pbv	1:1 pbv
Epoxy Putties	Product Name	Free Form TM AIR	Free Form TM AIR FAST	Free Form TM AIR Fire Safe	Free Form TM AIR HT	Free Form TM Habitat TM Black	Free Form TM Habitat TM Fire Safe TM	Free Form TM Habitat TM Flex FR	Free Form TM SCULPT
			u	0-	ų1	00	w	S	

Alginate

*Depnding on mass **If post cured according to heat post curing schedule

	ojie S				-moj	
 Product Name	A. W.	200 200 200 200 200 200 200 200 200 200	` ديري \	2) 07 05	0 0 0	
Accu-Cast TM 370-SD TM	3 parts water (70°F/21°C) : 2 parts powder by volume 4 parts water (70°F/21°C) : 1 part powder by weight	2 min.	3 min.	26.0	Off-White	
Accu-Cast TM BabyGel TM 2	<ul> <li>1 part water (80°F/27°C) : 1 part powder by volume</li> <li>4 parts water (80°F/27°C) : 1 part powder by weight</li> </ul>	2 min.	3 min.	26.0	Pink to Light Grey	
Accu-Cast TM BodyGelTM 880	1 part water (80°F/27°C) : 1 part powder by volume 3 parts water (80° F/27° C) : 1 part powder by weight	5 min.	8 min.	26.0	Off-White	
Accu-Cast TM FaceGeI TM 590	3 parts water (90°F/32°C) : 2 parts powder by volume 4 parts water (90°F/32°C) : 1 partpowder by weight	3.5 min.	5 min.	26.0	Tan	
Accu-Cast TM HandGelTM 570	3 part water (70°F/21°C) : 2 parts powder by volume 4 parts water (70°F/21°C) : 1 part powder by weight	3.5 min.	5 min.	26.0	Off-White	
Accu-Cast TM Phase 2 TM Gel	1 part water (70°F/21°C) : 1.5 parts powder by volume 2.5 parts water (70°F/21°C) : 1 part powder by weight	1.5 min.	2.5 min.		White to Pink to White	
Alja-Safe TM	1 part water ( $80^{\circ}F/27^{\circ}C$ ) : 1 part Alja-Safe TM powder by volume	5 min.	8 min.	26.0	Light Purple	
Alja-Safe™ Acrobat	1 part water ( $80^{\circ}F/27^{\circ}C$ ) : 1 part Acrobat powder by volume	5 min.	8 min.	26.0	Off-White	
Alja-Safe TM Breeze	5 parts water ( $80^{\circ}F/27^{\circ}C$ ) : 1 part liquid by volume	3 min.	8 min.	26.0	Blue	

55

### Gypsum/Plaster



*Depending On Mass And Environmental

<b>DIA</b> Produc	Fine Casti	Keramicas	Crystacal	Crystacal	Herculite
psum/ aster t Name	ng Plus	st	Œ	Lamina	Fibrefix
14619M KB 191864 H9460 03 19186M 03 191861 191861	1.43:1, 100/70	1.79:1, 100/56	2.86:1, 100/35 2.86 kg/litre, 3lb 9oz/pint	2.86:1, 100/35 2.86 kg/litre, 3lb 9oz/pint	1.82:1, 100/55 1.82 kg/litre, 2lb 4oz/pint
Setting Time	18 - 22 mins. @ pwr of 1.43:1, 100/70	8 - 12 mins. @ pwr of 1.79:1, 100/56	15 mins. @ pwr of 2.86:1	25 mins. @ pwr of 2.86:1	90 mins. @ pwr of 1.82:1
Strength, Dry Strength, Dry Connoressive	14.0 MN/m2 @ pwr of 1.54:1, 100/65	14.0 MN/m2 @ water demand	44.8 MN/m2 @ pwr of 2.86:1	41 MN/m2 @ pwr of 2.86:1	
Setting Setting Sterigth, Compressive	7.0 MN/m2 @ pwr of 1.54:1, 100/65	12.0 MN/m2 @ pwr of 1.79:1, 100/56	20.0 MN/m2 @ pwr of 2.86:1	15.0 MN/m2 @ pwr of 2.86:1	
Linear Linear Linear Linear	0.25% @ pwr of 1.54:1, 100/65	0.3% @ water demand	0.55% @ pwr of 2.86:1	0.45% @ pwr of 2.86:1	·

Find Complete Technical Bulletins and Health & Safety Sheets at: www.benam.co.uk

# Technical Charts

### Elkem Silicones CAF[®] Products

### **Several Product Ranges To Meet Your Needs**

- CAF[®] products (also called RTV-1 products) are one-component, silicone elastomers that cure at room temperature at various rates.
- Either acetic, oxime or alcohol-type, CAF[®] products have various viscosities ranging from fluid products to thixotropic and including a self-leveling version.
- They provide outstanding mechanical properties and adhesion over wide temperature ranges (from -70°C to +350°C according to the product) and very good resistance to natural ageing (UV, weathering, salt mist).
- Acetic CAF[®] products can be accelerated by adding an activator to give very rapid setting rates: products in the CAF AXAD range.

### **Industrial And Professional Range**

- Assembly and repair on automated industrial production lines.
- Sealing/bonding for mass production applications requiring high service levels (occasional or prolonged contact with chemicals and lubricants, temperature differences, etc.) making automated processing possible.
- Supplies for professionals (installers, assemblers, heating engineers, electricians, mechanics, general professionals and specifically in the renovation business).
- General assembly providing sealing, antivibration properties, bonding, damping, etc.

### **Maintenance Range**

- Maintenance of industrial sites or off-shore platforms.
- Repair/maintenance of air, rail, maritime fleets. Automotive repair for professionals and consumers.

### **Protection, Coating And Potting Range**

 Insulation, coating, potting and sealing of electrical and electronic assemblies.

### High-Performance Assembly And Protection Range

 Sealing, bonding and protecting assemblies subject to high constraints in terms of adhesion, temperature and/or corrosion and UV resistance.

### Caf[®] Products In The Elkem Silicones Range, High-Performance Products With Many Advantages

- Outstanding bonding properties on a wide variety of surfaces (glass, metal and plastics).
- Very easy to use in substitution applications or to supplement traditional preformed joints.
- Competitive cost (materials costs, limited processing and storage costs, etc.).
- Outstanding heat stability over a wide temperature range (- 70°C to + 350°C).
- Very good natural ageing resistance: long-lasting mechanical properties (sealing joints and very long-lasting flexible bonding applications).
- High insulating and thermal protection capacity.
- Good dielectric properties.
- Very chemically inert.

CAF[®] products are sold in various packs including 100 g tubes, 22 – 223 litre drums and 260 ml to 310 ml cartridges.

As for all of our products, our direct sales network, backed up by our local specialist distributors, provides high-performance services.

					Industrial ar	la protessional range			
		CAF 22 OX	CAF 30	CAF 1 Extra fluid	CAF 4	CAF 33	CAF 44	CAF 5661 CAF 5662	CAF 520
	Product category	Non-flowing, self-adhesive neutral	Non-flowing, adhesive	Flowable	Self-levelling, adhesive	Non-flowing, adhesive	Non-flowing	Non-flowing, adhesive	Non-flowing, self-adhesive, neutral
	Main characteristics	Elongation	Quick-setting	Fluid, heat stability, quick-setting	Mechanical properties	Heat stability, chemical resistances	High mechanical properties and fluid resistance	High hardness and heat stability	Fast kinetics and good adhesion
	Color	Trans-black	White- trans-black	Red	Off-white	White- trans-black	Grey	Ivory-black	Trans-white
	Cure-type	Oxime	Acetoxy	Acetoxy	Acetoxy	Acetoxy	Acetoxy	Acetoxy	Alkoxy
	Specific gravity at 25°C ⁽¹⁾	1.03	1.04	1.10	1.16	1.04	1.03	1.14/1.12	1.02
Properties before curina	Viscosity (MPa.s) ⁽²⁾		•	7 500	250 000	1	,		
0	Extrusion (g/min) ⁽³⁾	80	40		1	50	170	100/120	50
	Flowability ⁽⁴⁾	< 2 mm	< 2 mm	1	4 mm	< 2 mm	< 1 mm	< 5 mm	< 3 mm
	Skin formation time (min)	ω	Q	7	10	Q	7	9	5 to 8
Cured compound	Setting time for a 2 mm thickness (h)	ω	Q	Q	Q	Q	ω	7	7
	Cured thickness after 24 h (mm)	3.6	4.2	4.3	4.5	4.3	4	4	4
	Shore A hardness for 6 mm thick section (points) ⁽⁶⁾	20	20	54	37	25	38	55	15
	Secant modulus for 100% elongation (MPa) ⁽⁷⁾	0.45	0.6	2.2	0.8	0.6	1.0	3.3/2.5	0.3
Mechanical	Tensile strength (MPa) $^{(7)}$	1.5	2.2	က	3.8	2.5	2.9	5.8/5	1.1
properties after curing (7 davs)	Elongation at break $(\%)^{(7)}$	450	500	110	290	500	280	200/220	500
	Tear strength $(kN/m)^{(8)}$	4	5	4	4.5	5.4	7	10	
	Lap shear strength (MPa) ⁽⁹⁾	-	1.5	+	1.2	1.4	1.1	2.5	0.7
	Type of failure CF (cohesive failure) / AF (adhesive failure)	CF	CF	AF	CF	CF	AF	CF	СF
	Lower service temperature (°C)	- 55	- 60	- 65	- 65	- 65	- 60	- 65	- 60
Physical properties	Maximum continuous service temperature, 1000 h (°C)	200	250	250	225	250	200	250	150
arter curing	Maximum peak service temperature, 72 h (°C)	250	300 (black)	275	250	300 (black)	250	300	150
Storage	Shelf life from the production date (months)	18	24	24	24	24	24	18	12

(6) ISO R 868, DIN 53505, ASTM D 2240, BS 903 (A7), NF T 46003, NM 471 (7) ISO R 37 (H2), DIN 53504, ASTM D 412, BS 903 (A2), NF T 46002 (H2), NM 470 (8) ASTM D624 specimen A, NM492
(9) Aluminum AG3 specimen, 1 mm thick joint, NM748

ISO R 1183, DIN 53479, NM 703
 (2) Brookfield NF 7 56105, ASTM D 445
 (3) NM 495 A 3 mm / 3 bars
 (4) Non-flowing: Boeing 3 7502 NM 459 (mm), flowing: MIL S 880 2D, NM 458 (sec or min)
 (5) Temp. 23°C, relative humidity 50%

### **CAF[®]** Properties

**Technical Charts** 

High-performance assembly and protection

	CAF 505	CAF 510	CAF 530 Non-flowina.	CAF 50 Non-flowing.	CAF 8	CAF 36	CAF FR 55 Non-flowing.	CAF 5552S Non-flowing,	CAF 8 AXAD	CAF 33 AXAD	CAF 99 AXAD	CAF 5751 AXAD
ategory	Non-flow adhesive	ving, self- e, neutral	self-adhesive, neutral	Self-adhesive, neutral	Flowing, adhesive	Non-flowing, adhesive	self-adhesive, neutral	self-adhesive, neutral	Self-levelling, self-adhesive	Non-flow adhe	ring, self- ssive	Self-levelling, Self-adhesive
racteristics	High eld	ongation	Quick curing and high mechanical properties	Good adhesion and mechanical properties	High heat stability	High heat stability	Fire-stop, good adhesion	Good adhesion, oil resistance	Accelerated curing, heat stability	Acceler- ated cur- ing, high elongation	Accelerat- ed curing, good me- chanical properties	Fast cure, mechanical properties, injectable
	Translucent	Black- white-grey	Black-white- grey	Black	Red	Red	Grey	Black	Brick red	Black	Black	Off-white
Φ	Alkoxy	Alkoxy	Alkoxy	Alkoxy	Acetoxy	Acetoxy	Oxime	Oxime Low Meko*	Activated acetoxy	Activated acetoxy	Activated acetoxy	Activated acetoxy
gravity at 25°C ⁽¹⁾	1.03	1.38	1.3	1.25	1.14	1.02	1.4	1.33	1.14/1.43	1.04/1.43	1.11/1.43	1.3/1.17
r (MPa.s) ⁽²⁾					22 000				20 000/ -	- / -	- / -	100 000/-
n (g/min) ⁽³⁾	80	30	130	160		130	152	120		ı		
ty ⁽⁴⁾	< 2 mm	< 3 mm	< 2 mm	1 mm	30 sec	≤ 5 mm	< 1 mm	< 5 mm		≤ 5 mm	≤ 5 mm	< 5 mm
nation time (min)	10	10	10	15	ω	4	2	4	4	4	ო	4
ime im thickness (h)		15	ω	16	Q	9		10				
ickness after 24 h (mm)	4	ო	3.5	2.5	4.5	4.5		3.8		ı		
hardness for 6 mm stion (points) ⁽⁶⁾	17	24	34	33	34	30	20	40	36	25	51	53
nodulus for 100% on (MPa) ⁽⁷⁾	0.35	0.5	0.0	0.7	0.8	0.7	0.3	÷	0.8	0.6	2.3	3.1
trength (MPa) $^{(7)}$	2	1.4	3.5	2.1	2	ю	1.0	1.5	1.6	2.4	4.3	4.4
on at break $(\%)^{(7)}$	750	600	450	350	250	500	600	300	180	500	235	180
ngth (kN/m) ⁽⁸⁾	•	•	15	8.5	9	10			6.5	9	10	8.0
ar strength (MPa) ⁽⁹⁾	0.9	0.6	1.2	1.7	0.8**	2		0.85	-	2.1	2.17	2.2
ailure CF (cohesive failure) / ssive failure)	CF	CF	CF	CF	CF	CF		CF	CF	CF	CF	CF
ervice temperature (°C)	•	- 60	- 60	- 60	- 65	- 60		- 70	- 65	- 65	- 70	- 65
n continuous emperature, 1000 h (°C)	180	180	150	185	275	275		200	250	180	250	225
r peak :mperature, 72 h (°C)	180	200	185	220	300***	300***		250	300	250	275	250
from uction date (months)	12	12	12	Q	24	24	18	12	18	<del>1</del> 0	18	18
			* ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^ ^		· / teoteoo ()	jo,						

CF = Cohesive Failure AF = Adhesive Failure Adhesive: self-adhesive to aluminum, glass, enamel, ceramics: for other sur-faces it is recommended to use primers (see the Adhesion Primer datasheet)

* Methylethyl Ketoxime (MEKO) content < 1% ** 7 days at RT + 1 h at 240 °C *** 15 h, 320 °C 15 min, 350 °C

	C	A	B	P	r	D	p	eI	rt	;;	25	ני	CO	ni	t'	ď	]						
	CAF 731	Non-flowing, self-adhesive, neutral	Mechanical properties	White	Alkoxy	1.3		120	< 2 mm	10	ω	3.5	40	٣	3.3	420	13	1.2	CF	- 60	150	180	12
, servicing, repair	CAF 730	Non-flowing, neutral	High extrusion, mechanical properties	White	Oxime	1.02	ı	> 120	s 2 mm	7	7	4.6	25	0.5	1.9	400	4	0.2	AF	- 55	200	225	12
Maintenance	CAF 3	Flowable, adhesive	Non-slip	Translucent	Acetoxy	1.01	140 000		2 to 12 min	ω	Q	4.5	26	0.5	1.3	260	2.5	0.5	CF	- 60	200	225	18
	CAF 1	Self-levelling adhesive	Heat stability	Red	Acetoxy	1.12	250 000		5 min	7	Q	4.3	47	N	4.4	200	Q	1.8	CF	- 65	225	300	24
potting	CAF 7037	Flowable, non- adhesive, neutral	Release coating	Red	Oxime	1.1	50 000			30	Q	3.5	22	0.5	2	300	3.3	0.25	AF	- 60	225	250	12
ection, coating and p	CAF 4 dispersion	Flowable, adhesive	Sprayable	Off-white	Acetoxy	1.02	6 500	,	,	12	4		34	0.7	3.6	310	4.2	0.6	CF	- 65	200	225	24
Prot	CAF 2 fluid	Flowable self-adhesive, neutral	Self-levelling	Translucent	Oxime		30 000			12	16	ю	18	0.3	0.7	250	1.8	0.4	CF	- 50	150	250	10
		Product category	Main characteristics	Color	Cure-type	Specific gravity at 25°C ⁽¹⁾	Viscosity (MPa.s) ⁽²⁾	Extrusion (g/min) ⁽³⁾	Flowability ⁽⁴⁾	Skin formation time (min)	Setting time for a 2 mm thickness (h)	Cured thickness after 24 h (mm)	Shore A hardness for 6 mm thick section (points) ⁽⁶⁾	Secant modulus for 100% elongation (MPa) ⁽⁷⁾	Tensile strength (MPa) $^{(7)}$	Elongation at break $(\%)^{(7)}$	Tear strength $(kN/m)^{(8)}$	Lap shear strength (MPa) ⁽⁹⁾	Type of failure CF (cohesive failure) / AF (adhesive failure)	Lower service temperature (°C)	Maximum continuous service temperature, 1000 h (°C)	Maximum peak service temperature, 72 h (°C)	Shelf life from the production date (months)
							Properties before curing				Cured compound				Mechanical	properties after					Physical properties	arter curing	Storage

F = Flowable NF = Non-Flowing Technical Charts

### 60









Gelc	oat	s
10 % 400 94 Breakion 94 Blougation	3.0	2.2
sninpow elisuel	3.5	4.1
915091 9150919 9150919 9150919 9150919 915091	75	20
LOH	75	62
1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1030,000 1000,000 1000,000 1000,000 1000,000 1000,000 1000,000 1000,000 1000,000 1000,000 100000000	18	N/A
SSOUPLEH	42	42
Cure	Variable	Variable
0, cs	o	6-10
2°05 20°C	9 min.	N/A
2°21 9"	15 min.	N/A
11740d	24 min.	N/A
NIZEOZIX NIZEQ NIZEQ	Thixotropic	Thixotropic
Here XIM	100:2	100:2
Product Name	Crystic@ 65PA	Crystic® Fireguard 73PA

Scott Bader - Cystic[®]

Resi	ns			
te uoitegy Breation at (Edo) sc	1.1	2.5	1.5	1.7
	6.4	3.7	3.8	3.8
9464949 919499 919491	50	68	50	50
LOH	80	78	67	67
Water Mater	4	18	15	15
(Barcories) (Barouese Harouese	57	47	42	42
Cure Cure	Variable	Variable	Variable	Variable
3. c.	4	ω	25	17
2005	12 min.	ω	25 / 20	17
Jost a.	20 min.	12	39 / 29	22
Post Lin	30 min.	18	62/41	42
Nixed Nixed Nixed	Thixotropic	Thixotropic	Thixotropic	Thixotropic
"et xill	100:2	100:2	100:1 / 100:2	100:1
Product Name	Crystic® 356PA	Crystic® 471PALV	Crystic@ 2-446PA	Crystic@ 2-8500PA



www.benam.co.u

entley

🛃 🐝

We want watcher watche

HOW-TO

**IDEOS** 

SUPPORT

TECH

Stop by or call us to discuss your project

**Frederick Road** Hoo Farm Industrial Estate Kidderminster, Worcestershire DY11 7RA +44 (0)1562 515121

Unit 2, Aspen Way Five Ways Business Centre Feltham, Middlesex TW13 7AQ +44 (0) 208 751 6521

0

101356-0123

### www.benam.co.uk • info@benam.co.uk