Terms and Conditions

- 1. Not all products are listed in the catalogue. Please call for special requirements or information.
- 2. All orders are COD (unless prior arrangements have been made).
- 3. Shipped orders below \$50 are subject to \$5 handling surcharge.
- 4. Orders are FOB our warehouse.
- 5. All products are subject to GST and PST (if applicable).
- 6. Methods of payment; Visa, Mastercard, money order, certified cheque and cash.
- 7. Material Safety Data Sheets (MSDS) are available for all products.

Termes et conditions

- 1. Veuillez svp prendre note que tous nos produits ne sont pas inclus dans le catalogue. Nous contacter pour toutes demandes d'informations.
- 2. Toutes les commandes sont COD à moins d'avis contraire.
- 3. Les commandes de moins de \$50.00 sont assujetties à des frais de manipulation de \$5.00.
- 4. Les commandes sont FOB de nos entrepôts à moins d'avis contraire.
- 5. Tous les produits sont sujets à l'application de la TVQ et TPS.
- 6. VISA et Master Card, chèque certifié, traite bancaire et argent comptant sont acceptés.
- 7. MSDS disponible avec chaque produit.

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AOC POLYESTER RESIN

There are three main polyester resin types: General Purpose, Isophthalic, and Casting. All harden with 1% of MEKP (Methyl Ethyl Ketone Peroxide).

Waxed - Waxed resins contain Air Dry additive and cure to a tack-free surface. This is the preferred resin for one layer applications, final coats, or when sanding is required. Laminating additional layers is possible if the existing surface is wiped with acetone and sanded with coarse sandpaper. When curing it gives off less odour than unwaxed resin.



Unwaxed - When fully cured, unwaxed resins remain tacky. This allows for excellent adhesion between coats. Thus, it is the resin of choice for multiple laminations, such as thicker laminates or mold construction.

> General Purpose Resin

This most widely used orthophthalic resin has fast wet out and minimum sag on vertical surfaces. Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon*.

H596-GP

Unwaxed general purpose laminating resin. Working time @ $25^{\circ}C = 20-25$ min

H596W -GP

Waxed general purpose resin. Working time @ 25°C = 20-25 min

> Specialty Resin

500-FLEX

Waxed flexible orthophthalic resin. Available sizes: Gallon, 5 Gallon, 45 Gallon.

Working time @ 25°C = 20-25 min

H834 Series

Fast cure DCPD polyester resin. High rigidity. Surface preperation required between layers. Available sizes: 5 Gallon, 45 Gallon. Working time @ 25°C = 15-18 min

RTM/COLD MOLD/INFUSION/VACCUM Resins

General purpose RTM Altek R596 Ortho & R599 ortho series Corrosion Resistance RTM Altek R701 & R736 series Multi-Purpose RTM Altek R920 & R937 High Performance RTM Hydropel R015 & R037 series Low Profil RTM R049 Low profil modified Vinyl Ester Resin

White or Colored Resin

Available sizes: 5 Gallon and Drum.

Beige and grey balcony resin

Available sizes: 5 Gallon and Drum.

> Isophthalic Resin

Isophthalic, also known as tooling resin, is a grade higher than general purpose resin because of a denser molecular structure. This means higher strength and flexibility. During its curing reaction it has a low exotherm, thus, minimizing shrinkage and distortion of the final product. It also has good chemical and heat resistance. All these characteristics make it the resin of choice for mold construction.

F701/F737/F764 Series

Unwaxed isophthalic resin. Vipel F737 Corrosion resistant Isophthalic polyester resin. Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon*. Working time @ $25^{\circ}C = 25-30$ min

Nord RM2000

Nord Composites medium viscosity zero shrinkage tooling polyester. Dimensionnally stable with no print through. Available sizes: 5 Gallon, 45 Gallon

Working time @ 25°C = 45 min

> Casting Resin

Water clear medium viscosity resin designed for casting and embedding. May be used by itself or inconjunction with inexpensive fillers reduce cost, and reduce exotherm. Unwaxed for use in molds. Well suited for fiberglass or *Silicones Inc* silicone molds. Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon*.

Casting Resin

Clear polyester casting resin.

AM-1 & AM-2 Casting Resins

Clear acrylic modified casting resins. Good air displacing properties, low exotherm, and minimal shrinkage.

* 45 gal drums are approximately 225 kg

VINYL ESTER RESIN

Vinyl ester resin is a grade higher than polyester resin, yet not as toxic as epoxy resin. It has good strength, impact resistance, and the best chemical resistance of any resin. All resins listed can be used for laminating or as a topcoat with the addition of *Air Dry*. Vinyl ester resins harden with the use of 1-2% *MEKP*. Listed vinyl esters have a shelf life of three months.

- Note: Customized working time available on request.
 - Also on request, these resins can be purchased unpromoted (without *Cobalt* and *DMA*) to extend the the shelf-life and allow for customizing of working and curing time from batch to batch.

Typical Room Temperature Properties of Clear Castings made with Derakane Resins

Mechanical Properties	M411-350P	8084P	M470-300P	901P
Tensile Strength, psi Tensile Modulus, psi x 10⁵	11-12,000 4.6	10-11,000 4.6	10-11,000 5.1	12,500 5.0
Elongation, %	4.0 5.0-6.0	4.0	3.0	5.5
Flexural Strength, psi	16-18,000	16-18,000	18-20,000	18,500
Flexural Modulus,psi x 10 ⁵	4.5	4.4	5.5	4.8
Heat Distortion Temp, °F	210-220	170-180	295-305	210-220
Barcol Hardness	35	30	40	35

Derakane M411-350P

General purpose clear laminating vinyl ester resin. Excellent moisture resistance. In addition, resistant to a wide range of acid, base and salt solutions, commonly up to 210°F. Its excellent mechanical properties make it popular for home built aircraft and structural laminates with advanced reinforcements. When properly formulated and cured, complies with FDA regulations for repeated use in contact with food.

Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon Working time @ $25^{\circ}C = 15-20$ min

Derakane 8084P

Elastomer-modified vinyl ester resin giving it excellent impact and abrasion resistance in addition to high adhesion strength. Tensile elongation is the most of any vinyl ester or polyester resin. Ideal for construction of white-water kayaks, canoes, and other composite parts that need to be impact tolerant.

Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon Working time @ 25° C = 15-20 min

AOC Corrosion and Fire Retardant

We offer wide range of Corrosion Resistant , Low VOC, Bisphenol A, Epoxy VE resins.

Derakane M470-300P

High temperature resistant (up to 350°F) vinyl ester resin. Minimal shrinkage and distortion. Used in high heat applications including mold construction when post cure heat is applied. High acid and solvent resistance. Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon

Harsh Chemical Environment? Call **us**, — we have a **Dow** Chemical Service Guide listing most chemicals at different concentrations and can tell you whether 470P will stand up under your worst conditions.

Working time @ 25°C = 15-20min

Chempulse 901P

General purpose laminating vinyl ester resin. Excellent moisture resistance. In addition, resistant to a wide range of acid, base and salt solutions, commonly up to 210°F. Excellent mechanical properties.

Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon Working Time @ 25°C= 15-20 min

MVR-8013SP Infusion

A low viscosity infusion versatile vinyl ester for resin infusion processing. Excellent resistance to acids, alkalies, and oxidizing chemicals. Outstanding toughness and fatigue properties.

Availalble sizes: 5 Gallon, 45 Gallon Working Time @ 25°C= 25-30 min

ODOUR SUPPRESSANT AND AIR RELEASE ADDITIVES AVAILABLE - SEE RESIN ADDITIVES p.18

In most cases, epoxy resin is superior in toughness, tensile strength, moisture resistance, and adhesion strength. It bonds exceptionally well to: wood, concrete, ceramics, metals, fiberglass, and non-waxy plastics. Ideal for repair work. It has low shrinkage and when modified with fillers it can be sanded and shaped. Multiple laminations should be done at once or while the surface is still tacky (usually up to 4 hrs). Most of our epoxy resins have a higher viscosity than polyester or vinyl ester laminating resins, thus, wetting-out cloth may not be as easy. To lower the viscosity; choose a hardener with a lower viscosity, which is measured in centipose (cps), or warm-up epoxy and hardener before mixing (note: this will shorten working time). For exterior use, epoxy surfaces must be painted for UV protection. Epoxy's drawbacks are that it can take a few days for full cure and that it is toxic in its liquid state.

Handling and Storage - Please take precautions when using epoxies - protective eyeware, protective clothing, and a well ventilated work space. Haziness and crystallization will occur with most epoxies stored at cold temperatures (below 10°C/50°F) for extended periods. Simply immerse part of the closed container in hot water to bring the epoxy back to a clear state - this will not adversely affect working or mechanical properties.

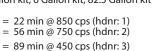


System Three Epoxy (2:1)

A low viscosity clear epoxy resin. Used for gluing, filleting, filling, and fairing with appropriate fillers. Good wettingout properties make it suitable for laminating. With the #1 hardener, the epoxy will set at temperatures as low as 2°C (35°F) and in damp conditions. Long working time and low viscosity with #3 hardener makes it suitable for vacuum bagging. Different hardeners can be blended to customize working time. Simple 2:1 ratio.

Available sizes: 1.5 Quart kit, 1.5 Gallon kit, 6 Gallon kit, 82.5 Gallon kit

Working time @21°C = 22 min @ 850 cps = 56 min @ 750 cps = 89 min @ 450 cps



System Three Clear Coat Epoxy (2:1)

A very low viscosity water clear tough epoxy resin. The clearest sytem that we sell. Excellent wetting-out properties. No amine blush. Will not spill out of cloth on vertical surfaces. Popular choice for wood strip boat construction.

Available sizes: 1.5 pint kit, 1.5 Gallon kit, 3 Gallon

Working Time $@21^{\circ}C = 60 \text{ min}$



SB-112 (2:1)

kit, 6 Gallon kit

Another clear epoxy from System Three that is suitable for structural fiberglass repairs. Developed for surf board construction. Contains UV stabilizers. Polyester resin and gelcoat will bond to sanded SB-112! Ask for data sheet.

Available sizes: 1.5 Pint kit, 1.5 Gallon kit

Mirror Coat

A System Three clear low viscosity self-levelling epoxy for use as a tough smooth coating for table tops, bar tops, clocks, hatches, floors, small castings and woodwork. Mix ratio is 2:1. Hard surface (80 Shore D). Available sizes: 1.5 Pint kit, 3 Quart kit, 1.5 Gallon kit

Working time @ $25^{\circ}C = 60 \text{ min}$

T-88 Structural Epoxy Adhesive (1:1)

A medium viscosity two-component structural epoxy adhesive by System Three. Widely used in home built aircraft construction. This clear adhesive bonds to almost anything. It has good adhesive strength, tensile strength and impact resistance. Adhesive of choice for wood applications, including teak. Excellent for bonding dissimilar products. Available sizes: 50 ml cartridge, 1/2 Pint kit, Pint kit, Quart kit, Gallon kit, 2 Gallon kit



Working time @ 25℃ = 40-60 min Handling time @ 25℃ = 4-6 hrs

Quickfair Putty

A System Three lightweight, vacuum processed, microballoon filled, fast-curing two-part epoxy fairing putty with excellent moisture resistance. Designed to be used above and below the waterline. Non-sagging, butter-like consistency that sufficiently cures to be hand-sanded in 5 hrs and machine



sanded in 6 hours. Mix ratiois 2:1. Density is 5.7lbs per gallon. Cures brown. Available sizes: 1.5 Quart kit, 1.5 Gallon kit Working time @ 22°C = 10 min

SculpWood

Moldable, carvable, sandable epoxy putty for replacement of damaged wood. Ideal for replacing missing sections of windowsills, frames and furniture or adding new sections to existing structures. Porous, rotted or deteriorated wood should first be treated with a low-viscosity sytem such as RotFix. Available as 2 Quart kit only.



System Three Plunger Pumps

Sold in pairs; one for the resin and the other for the hardener. Screws onto System Three containers. One stroke of each delivers the correct 2:1 mix ratio.

The Epoxy Book

A System Three Publication



OTHER SYSTEM THREE PRODUCTS AVAILABLE;

Quick Cure, Epoxy Pigments, Water-based Polyurethane Paints, and Varnish.

4

and Vehicle System:

For Fabrication and Repairs

Mechanical Properties	West 105/205	MVS 410/462	System III
Tensile Strength (psi)	7,800	9,900	7,500
Tensile Elongation (%)	3.4 %	5.2 %	11 %
Flexural Strength (psi)	14,000	17,700	12,500
Compressive Yeild (psi)	11,400	14,200	12,000
Hardness (Shore D)	83 D	87 D	75 D
Heat Deflection Temp. (°F)	118°F	158°F	123°F



Epoxy 105 + Hardener 205/206 (5:1)

A medium modulus clear epoxy resin. The original Wood Epoxy Saturation Technique. Easy to use in coating applications. Popular for marine use. Used for gluing, filleting, filling, and fairing with appropiate fillers.

Available sizes: 1.2 Quart kit, 1.2 Gallon kit, 5.2 Gallon kit, 62.4 Gallon kit.

Working Time @ 22°C = 9-12min @1300 cps(hdnr:205) = 20-25min @ 580 cps (hdnr: 206)

Epoxy 105 + Hardener 207 (3:1)

An exceptioally clear epoxy system. Mostly used as a moisture resisitant natural wood finish on wood strip marine craft.

Available sizes: 1.3 Quart kit, 1.3 Gallon kit, 5.8 Gallon kit.

Working Time @22°C = 20-25 min

300-Series Mini Pumps

Sold by the pair; one for the resin and the other for the hardener. One stroke of each pump delivers the correct ratio of resin to hardener. The current package of pumps is good for all size kits for both 3:1 and 5:1 mix ratios.



EPOXY RESIN

-2 SE- 7 NB

SPECIAL COATING

come d'alla

......

MVS Epoxy 410 + Hardener 462/464 (5:1)

An easy to use, non blushing, high performance epoxy laminating system from PTM&W. Low viscosity and fast wet out. Outstanding physical properties across the board and very high heat resistance contributes to greater long term stability than similar products. A highly engineered laminating system with modern ingredients which outperforms common epoxies designed for coating.



Available sizes: 1.2 Quart kit, 1.2 Gallon kit, 5.4 Gallon kit, 63.1 Gallon kit. Working Time @ 22°F = 11 min @ 900 cps (hdnr: 462) = 23 min @ 500 cps (hdnr: 464)

MVS Epoxy 410 + Hardener 468 (3:1)

An easy to use, non blushing, high performance epoxy laminating system from PTM&W. Low viscosity and fast wet out. Outstanding physical properties across the board and very high heat resistance contributes to greater long term stability than similar products. A highly engineered laminating system.

Available sizes: 1.3 Quart Kit, 1.3 Gallon kit, 6.0 Gallon kit, 69.5 Gallon kit. Working Time @ 22°F = 58 min @ 640 cps (hdnr: 468)

MVS Epoxy 420 + Hardener 468 (3:1)

Identical cured properties to MVS 410, but with a longer pot life of 2 hours. Used with MVS 468 hardener ONLY.

Available sizes: 1.3 Gallon kit, 5.8 Gallon kit, 69.5 Gallon kit.

MVS 450 Epoxy Fairing Compound (1:1)

A two component, lightweight fairing putty from PTM&W. Excellent moisture and heat resistance make this an ideal marine fairing material. Colour coded 1:1 mix for easy handling. Thin smooth mixed paste allows thin feather edging, but will not sag during exotherm temperatures unlike do-it-yourself resin/filler blends. Will cure fully at room temperature, but still exhibits unusually good high temperature stability. Can be applied up to 1.5" thick without excessive shrinkage. Cured product weighs 6lbs/gal.

Available size: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Mechanical Properties	MGS 335*	MGS 418*	PR 2032*
Tensile Strength (psi)	10,000-11,500	11,000-13,000	9,800
Tensile Elongation (%)	5-6.5%	5-6%	2%
Flexural Strength (psi)	16,000-18,000	18,000-22,000	16,800
Hardness (Shore D)	80-85	88-92	86-88
Glass Transition Temp (°F)	150-184°F	220-255°F	196°F

MGS properties from post-cured samples and tested to DIN standards
 ** Aeropoxy properties from unpost-cured samples tested to ASTM standards



High modulus laminating epoxies manufactured in Germany by Martin G. Scheufler. Most MGS systems are certified for aircraft use by the German Federal Aviation Authority.

MGS Epoxy 335 + Hardener H335/H340

Low viscosity, low toxicity laminating resin approved by the German Federal Aviation Authority. Excellent mechanical and wet-out properties. Will not spill out from fabrics on vertical surfaces. Will maintain mechanical properties up to 190°F if post-cured. Mix ratio is 100:45 by volume or 100:38 by weight. Hardeners can be blended to obtain optimum working time. Available sizes: 1.4 Quart kit, 1.4 Gallon kit, 5.8 Gallon kit, 7.2 Gallon kit.

Working time @ $20^{\circ}C = 15-25$ min (hardener: 335) = 6 hours (hardener: 340)

MGS Epoxy 285 + Hardener H285/H287

Low viscosity, low toxicity laminating resin approved by the German Federal Aviation Authority. Excellent mechanical and wet-out properties. Will not spill out from fabrics on vertical surfaces. Will maintain mechanical properties up to 210°F if post-cured. Mix ratio is 100:50 by volume and 100:40 by weight. Hardeners 285 and 287 can be blended to obtain optimum working time. Available sizes: 1.5 Quart kit, 1.5 Gallon kit, 6 Gallon kit.

> Working time @ $20^{\circ}C = 2-3$ hrs (hardener 285) = 5-6 hrs (hardener 287)

MGS Epoxy 418 + Hardener H418

Low viscosity, low toxicity, heat resistant laminating resin approved by the German Federal Aviation Authority. Exceptional static and dynamic load bearing properties. Will not spill out of fabrics on vertical surfaces. Will maintain mechanical properties up to 250-260°F if post-cured. Mix ratio is 100:48 by volume and 100:40 by weight. Available size: 1.5 Gallon kit, 6 Gallon kit.

Working time @ $20^{\circ}C = 5-6$ hrs

V51 Flexibiliser

A reactive flexibiliiser that is incorporated into the epoxy molecule during cure. Can be added to MGS 335, MGS 285, or MGS 418. Cured epoxy tensile elongation as high as 45% can be obtained with the addition of V51. Add as much as 1:1 ratio of V51 to MGS epoxy resin.

NOTE: Resin/hardener mix ratio must be adjusted after addition of V51, see data sheet. Available sizes: Pint, Quart, Gallon.



Quality materials for high performance parts. A line of laminating resins, strucutural adhesives, and lightweight fillers manufactured by PTM&W Industries.

Aeropoxy 2032 Laminating Resin

A high performance epoxy laminating resin designed for demanding structural applications. Wets fabric easily for predictable laminating with minimal drain. Excellent cured properties with exceptional flexural strength. Heat resistance to 200°F without post cure. Lower toxicity than comparable products. Mix ratio is 3:1 by volume or 100:27 by weight



Available sizes: Quart kit, Gallon kit, 6.5 Gallon kit.

Working time @ 22°C = 30 min (hardener PH3630) = 60 min (hardener PH3660) = 2 hours (hardener PH3665)

Aeropoxy ES6228 Epoxy Adhesive

A light paste adhesive for high strength metal bonding. Capable of bonding to slightly oily surfaces, for reliable bond and performance. Mix ratio is 1:1 by weight or volume. Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Working time @ 22°C = 1.5-2 hrs

Aeropoxy Light Filler

A two component epoxy fairing and filling material. Exceptionally light weight at only 4 lbs/gallon, this filler is easy to sand yet retains excellent flexibility. Smooth thixotropic texture for holds a fine feather edge, yet will not sag in thick sections. Aeropoxy light is a non-toxic material, with no hazardous or restricted materials in the resin or hardener. Flexibilty,



excellent adhesion, and non corrosive nature lead to very good bond line stability and long term durability. Colour coded, 2:1 mix ratio. Cures to tan colour.

Available sizes: 1.5 Quart kit, 1.5 Gallon kit, 7.5 Gallon kit.

Working time @ $22^{\circ}C = 25-30$ min Time to shape @ $22^{\circ}C = 2-3$ hrs Time to sand @ $22^{\circ}C = 5-6$ hrs



> PTM&W Laminating Epoxies

A broad array of laminating systems for tough, high performance parts.

PT 2520 Mid-High Temp Laminating Epoxy

An amber, unfilled intermediate high temperature epoxy laminating resin. For service to 325°F Additives allow it to wet fabric easily for fast, reliable fabrication. For high temp service parts that cannot be post cured in the mold. Economical high temp resin. Available sizes: 10.5 lb kit, 46.5 lb kit, 446 lb kit.

PT 2846 High Temp Laminating Epoxy

An unfilled high temperature laminating system that can provide service over 425°F. Designed for demanding, high temp composite applications. Provides easy wet out, and very easy handling during fabrication. May be used for unsupported post cure, however will provide maximum stability when fully cured on a high temperature master. High temp service obtained without the use of VCHD or restricted diluents. Available sizes: 10.8 lb kit, 43 lb kit, 536 lb kit.

PT 5355 Fire Retardant Laminating Epoxy

A white, filled, high performance fire retardant laminating epoxy. Easy, room temp cure epoxy which exhibits self extinguishing characteristics without the usual F/R additives. Good cured physical properties and toughness. Available sizes: 10.8 lb kit, 50 lb kit, 536 lb kit.

> PTM&W Infusion Epoxy



PT 2712 Infusion Epoxy

A high performance, low viscosity infusion epoxy. Special wetting agents allow for fast, even flow and wet out. Low viscosity does not come at the expense of cured physical properties, which exhibit excellent toughness and heat resistance. Available sizes: 11 lb kit, 44 lb kit, 611 lb kit.

PT5712 High Temp Infusion Epoxy

A high temp epoxy infusion resin with low mixed viscosity and excellent flow properties. An excellent system for large infused parts with the ability to be post cured free standing to speed production. Excellent long term stability. Available sizes: 48 lb kit, 605 lb kit.



A high quality structural epoxy resin series for lamination of glass, kevlar and carbon parts. Combining selections from the resins and hardeners below allow this versatile system to be tailored to the application. Custom thixotropic and toughened systems are also available.

Pro-Set 117LV Epoxy

Very low viscosity epoxy system designed for resin infusion and closed mold techniques.

Pro-Set 125 Epoxy

Good general purpose structural laminating epoxy. Fast, easy wet out.

Pro-Set 135 Epoxy

Similar to 125, but with greater elongation and higher flexural properties.

Pro-Set 145 Epoxy

Higher viscosity system for wet layup of vertical surfaces.

Pro-Set Hardener 224, 226, 229, 237 & 239

All these hardeners are compatible with all above listed Pro-Set Epoxy Resins. These allow for gel times from 20 minutes to over 400 minutes at 72°F and permit a wide range of construction techniques and laminate schedules. Note: Elevated temperature post cure is required with the slower hardeners to achieve maximum cure properties.

Pro Set 185/285 Fairing Compound

A low density filled epoxy system for fairing and filling large surfaces. Excellent bond to well prepared substrates and an 8 hour work time to allow shaping. Sands easily to a fine feather edge.

Pro-Set 175 Adhesive

A versatile, multipurpose adhesive with outstanding adhesion and cured physical properties. Packaged in side by side cartridges for use with dispensing guns allowing for clean application little waste. Thixotropic paste consistency flows easily with excellent surface wetting while retaining good gap filling abilities. Working times for 1/2" bead at 22°C.

Working time = 20 min (hardener 273)

= 75 min (hardener **275**)

= 150 min (hardener **277**)

* All can cure at 60°F, while 273 can cure as low as 45°F

Proset 176/276 Adhesive

A highly toughened version of the standard adhesive. Useful on difficult to bond substrates, and where high peel and other complex loads will be imposed.

EPOXY TOOLING



PTM&W provide an outstanding range of epoxy tooling materials which are both high performance and cost effective. Unique material properties allow economical and reliable mold construction techniques. Most systems are available for both room temperature (<200°F) and high temperature (300°F+) service. A large variety of hardeners

are available to tailor a system to the given application. For more information please visit <u>www.ptm-w.com</u>.

> Room Temp Tooling Systems

PR 1105 Surface Coat

A white, soft paste, room temperature epoxy surface coat. Smooth thixotropic, properties allow it to be applied easily to outside corners and vertical surfaces with minimum sag. A variety of hardeners allow for a wide range of work times, with some providing moisture resistant cures for fabrication of plaster faced patterns. Available sizes: 13.5 lb kit, 62.2 lb kit.

PR 1154 Surface Coat

A white, medium viscosity, room temperature surface coat with a variety of hardeners to allow a large range of fabrication environments. Lower viscosity provides excellent reproduction of pattern detail without trapping air. Forms a tough, durable surface that is easy to sand or scribe. An excellent general purpose epoxy surface coat. Available sizes: 11.5 lb kit, 57 lb kit.

PR 1414 Surface Coat - Silicone Carbide

A room temperature silicone carbide filled epoxy that provides outstanding surface hardness, durability and abrasion resistance. May be applied by brush as a surface coat, or cast in thin sections to form an extremely tough die surface. Available sizes: 14.3 lb kit, 66 lb kit.

PR 2114 Filled Laminating Epoxy

A room temperature filled epoxy laminating resin designed for the production of durable, stable tools. Fast wetout with optimum filler load for minimum drain on vertical surfaces. Excellent moisture, chemical and impact resistance make this an excellent general purpose epoxy tooling resin. Wide hardener selection makes this a very versatile resin. Available sizes: 10.6 lb kit, 47.2 lb kit, 590 lb kit.

RT2C Tooling Dough

A strong, fiber reinforced paste epoxy system generally used for producing sandwich construction molds. Such molds are very durable and allow very rapid construction. Smooth, colour coded mix system with good cohesive properties for easy handing and application. Very low curing exotherm produces negligible shrinkage – less than 100²F for a 1 lb mass! Excellent strength to weight ratio, machines easily. Can be applied several inches thick for exceptionally stiff tools. Ask for a data sheet the unique construction epoxy mold construction techniques possible with this material. Available as 40 lb pail kit only.

> High Temp Tooling Systems

PR 1554 Surface Coat - Aluminum

A grey, aluminum filled, high temp epoxy surface coat. Smooth viscosity, stands up well to frequent temperature cycling. Low viscosity fills details well without trapping air, but with minimum sag on vertical surfaces. Provides high performance service up to 325°F. Available sizes: 11.2 lb kit, 56 lb kit.

PR 1945 Surface Coat - Silicone Carbide

A black, high temperature, silicone carbide filled epoxy surface coat. Developed for prepreg layup tools, it withstands cutting prepreg right on the tool surface. Excellent heat resistance and durability for long tool life. Designed for the most demanding high temperature composite applications. Available sizes: 12.1 lb kit, 60.5 lb kit.

PR 1995 Surface Coat - Graphite

A high temp, graphite filled epoxy surface coat. Unique thermal expansion characteristics make it ideal for the most severe oven or autoclave service. Easy application allows with minimal sag and good air release. Easily scribed, but resists chipping and stress cracking in the most demanding environments. Available sizes: 12.3 lb kit, 61.6 lb kit.

PR 2620 Laminating Epoxy

An grey aluminum filled intermediate high temperature epoxy laminating resin. Filler content controls cost, while providing tough tools with high tensile and flexural strength. Ideal resin for tooling that requires a free-standing, off model post cure. This allows use of lower cost patterns, and overall savings in a tooling program. Works well for vacuum form molds, foam molds, and RTM molds where frequent temperature cycling is experienced. Available sizes: 10.2 lb kit, 51 lb kit, 534 lb kit.

PR 2846 High Temp Laminating Epoxy

An unfilled high temperature laminating system that can provide service over 425°F. Designed for demanding, high temp composite tooling applications. Provides easy wet out, and very easy handling during fabrication. May be used for unsupported post cure, however will provide maximum tool stability when fully cured on a high temperature master. High temp service obtained without the use of VCHD or restricted diluents. Available sizes: 11 lb kit, 44 lb kit, 550 lb kit.

PR 4935 High Temp Casting Epoxy

An aluminum filled, high temperature casting system for service up to the 500°F range! A tough system which pours well to reproduce fine details. Used for foundry patterns, vacuum form molds, compression molding dies, and autoclave fixtures and spacers. Available sizes: 13.1 lb kit, 60.3 lb kit.

PT 5712 High Temp Infusion Epoxy

A high temp epoxy infusion resin with low mixed viscosity and excellent flow characteristics. An excellent system for large infused tooling with the ability to be post cured free standing to save production pattern making costs. Excellent long term stability. Available sizes: 48 lb kit, 605 lb kit.

PLUG & PATTERN



Full line of Duratec products available



Duratec Polyester Sealer 823A

A low viscosity, rapid curing, penetrating sealer for surfacing composite plugs and patterns and sealing woods, veneers, plaster, concrete, and raw composite surfaces. Also useful for anchoring lacquers, urethanes, polyesters, vinyl esters and most epoxies to a variety of substrates. The best choice for sealing MDF plugs prior to surfacing with *Duratec Surface Primer*. Also available in a high temp vinylester version. Available size; Gallon, 4 Gallon Case.

Duratec Surface Primer 707-002

A *Duratec* high build viscous polyester surface primer that provides outstanding filling and leveling properties for a variety of substrates. This popular high build grey coloured primer has the unique ability to be polished to high gloss finish. Ideally suited for rapid coat build-up for plug/pattern surfacing. Adheres to fiberglass (including epoxy resin), metal, wood, pressboard, brick, concrete, and polyurethane foam. Apply upto 40 mils wet on wet. Thix index: 5. Working time = 16-18 min @ 2% MEKP. Available sizes: Quart, Gallon, 4 Gallon Case.

Duratec EZ Sanding Primer 707-060

Another *Duratec* high build viscous sprayable surface primer that provides outstanding filling properties for a variety of substrates. Builds rapidly and provides a very easily sanded, low porosity smooth surface. Apply upto 20 mils wet on wet. Thix index: 6.5. Working time = 22 min @ 2% MEKP. Available sizes: Gallon, 4 Gallon Case.

Duratec Vinyl Ester Primer 1799-005

A high quality grey surface coating for mold surfacing and re-surfacing. High build, high temperature (300° F), impact resistant coating with extremely low subsurface porosity versus tooling gelcoat. Thix index: 6.0-6.7. Working time = 18-22 min @ 2% MEKP. Available sizes: Gallon, 4 Gallons Case.

Duratec Vinylester Topcoat 1904-045

A tough, high temperature (300°F), clear high gloss topcoat for plugs and molds. Durable and chemical resistant finish. Also used as an in-mold coating for epoxy parts. Low viscosity with good thixotropic properties allow a smooth, fast build. Available size; Gallon.

StyroSafe[®]

Styrosafe 30P-121 Laminating Resin

A unique polyester resin, from Duratec, for laminating directly on Styrofoam without an intermediate barrier. After two laminate layers with Styrosafe, conventional polyester resins can be employed. The only one of its kind. Available sizes; Gallon and 5 Gallons.

Styrosafe 704-017 Sprayable Fairing Primer

A fast, high build sprayable Duratec polyester fairing primer that can be applied directly to Styrofoam substrates without attack. Seals the foam to allow the use of other polyester products, including the full line of conventional Duratec surfacing materials. Available sizes; Gallon.

Precision Board Tooling Foam

Precision Board by Coastal Enterprises is a rigid, high density urethane board for tooling and pattern applications. They offer many advantages not found in other urethane modeling materials: continuous block sizes as large as 24" x 60" x 120", continuous heat resistance to 300°F (in the PBHT line), eleven densities up to 48pcf, no outgassing for full prepreg compatibility, very low dust and clean non abrasive chips when cutting. The factory can also produce custom bonded block to any size, saving considerable time and money for shops with large projects. Temperature resistance allows for many direct molding applications such as vacuum forming, eliminating the need for a laminated tool.

Precision Board Sign Foam

Low dust machining allows easy clean up. This material has excellent low fire and toxicity ratings, and offers a "life of the sign" warranty. A series of matched adhesives and surfacing materials completes the line. Available in standard density of 15 and 18pcf and thicknesses of 1", 1.5" and 2". Sheet size is 4' x 8'. A full range of densities and sizes available but may be subject to extra costs and lead times.

Precision Board Marine and Interior Foam

Precision Board is an outstanding replacement material for traditional marine and interior structure substrates. It will not rot, split, warp or crack from moisture absorption. It is impervious to all standard composite resins, saltwater, oils and solvents. It provides excellent insulating properties, has very high strength to weight ratios and qualified fire retardant to Mil - Class A, ASTM and FAR commercial airline burn specifications.

FSC-88 WB Water Based Primer

A sprayable and brushable water based filler and primer that provides high build, dries rapidly and sands easily. A perfect companion to Precision Board, it can also be applied directly over Styrofoam substrates without attacking or degrading them. Thins and cleans up with water. An excellent primer for all types of topcoats. White in colour. Available in Gallons.

FSC-360 WB Water Based Filler

A water based filler and repair material for Precision Board and Styrofoam based materials. Used in conjunctioin with FSC-88 to provide a complete sanding and fairing system that is fast, easy to use and stable. Available in Gallons.

PB Hard Coat

A two component non hazardous and non flammable coating system used to apply a hard, protective shell to softer substrates such as foams and wood materials. Can be applied any thickness and used to create textures. Thin paste mixed viscosity. Must be painted for UV exposed service, but will accept any topcoats. Cleanup with warm, soapy water. Available sizes; Quart and Gallons.

GELCOAT

Gelcoat is the smooth, usually non-reinforced, outside pigmented surface of a fiberglass structure. Stock colours are white, off-white, black, and neutral. Any other colours available on request (ask for gelcoat colour chart). Prices differ depending on colour. All gelcoats listed are unwaxed, meaning that they are designed for application into a mold. If gelcoat is required for a repair or refinishing of a FRP part, then request a waxed gelcoat. A waxed gelcoat will ensure a tack-free surface which will not clog sandpaper if sanding is required. All gelcoats have a working time of 15 to 18 min when mixed with 1% of MEKP hardener at 20°C. The recommended thickness of gelcoat is 15 to 18 mil. Coverage is approximately 60 ft² per gallon.

Computerized Colour Matching

Matching chip with a minimum diameter of 20mm required. Minimum gelcoat order with colour match is a gallon. No charge if order is 10 gallons or over.



World Leader in Resin Technology

G112-series

Black, grey or white sanding gelcoat. Used for parts or plugs requiring refining or sanding. Superior sanding and air release. Available in spraying or brushing. Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon (drum).

full line of AOC gelcoats available

G141-series

Balcony gelcoat sprayable or brushable. Avaialble sizes : quart, gallon, 5 gallon and drum.

G412-series

Clear balcony gelcoat that cures to tack free finish.

G220-series

Isophthalic production grade spraying gelcoat. UV resistant ISO gel. Available sizes: Quart, Gallon, 5 Gallon, 45 Gallon (drum).

G300-series

ISO/NPG gelcoat. Available sizes : Quart, Gallon, 5 Gallon, Drum.

G402-series

Super clear hybrid isophthalic/NPG spraying gelcoat developed for marble applications prevents staining. Available sizes: Quart, Gallon, 5 Gallon, Drum.

AOC brushable and sprayable black or orange tooling gelcoats

Tooling Gel Coat combine neopentyl glycol and iso-resins, monomers and reinforcing fillers for longer high-gloss retention and the extra durable surface needed for mold manufacturing. It develops its maximum barcol hardness and toughness after approximately one week at normal temperature. Heating will speed up this cure process. It is excellent for all FRP mold making applications. Available sizes: Gallon, 5 Gallon, Drum.

Distribution Composites has a wide variety of sprayable and brushable gelcoats for each type of application. Please contact a DC representative for more information.

Polyester Pigments

Colour paste pigments used for tinting polyester and vinyl ester resins and gelcoats. Add no more than 10% by weight. The stock colours are: white, black, grey, gold oxide, tan, brown, dark brown, orange, candyapple red, red, dark red, yellow, canary yellow, dark green, and dark blue. See front colour card for approximate colours. Available sizes: 50 mL, 250 mL, Quart, Gallon.



Duratec Clear Hi-Gloss Additive

A gelcoat additive for repair and refinishing. It lowers the viscosity of gelcoat and makes it easier to spray. It also increases gloss, color and light stability, impact resistance, and chemical resistance. Add up to 50% of total gelcoat mixture. Available sizes: Quart, Gallon, 4 Gallon Case.

Duratec Clear Topcoat 904-045

A high build, hard super clear high gloss coating designed as a high gloss topcoat for polyester products. Good chemical resistance, high impact strength, and excellent color and light stability. Easy to use in the place of gelcoat as an inmold coating. Thix index: 3. Working time = 15-17 min @ 2% MEKP. Available sizes: Quart, Gallon, 4 Gallons Case.

Duratec Crystal Clear Topcoat 904-040

What clear coat is for cars, this is for composites. Produces a very clear, high gloss coating that adds a UV resistant, impact resistant surface. Also used for coating wood, furniture, musical instruments. Low viscosity sprays easily. Exceptional colour and light stability. Can be easily pigmented. Available size; Gallon, 4 Gallon Case.

Duratec Vinyl Ester In-Mold Primer 1794-034

A white high build vinylester in mold primer for manufacturing postpainted composite parts. Compatible with polyester, vinyl ester and epoxy-resin systems. Withstands high temperature open and closed mold processes including epoxy pre-preg applications. The primer is formulated for low shrinkage. A gel coat alternative for epoxy parts. Available size: Gallon, 4 Gallon Case.

10

REINFORCING GLASS

The term "Fiberglass" generally refers to the standard E-glass reinforcement. Fiberglass is woven of E-glass yarn consisting of a continuous length of multi-filaments which are produced by extruding actual molten glass. Fiberglass is designed to be embedded in a liquid resin. Once the resin cures, together they create a solid shaped sheet with tremendous strength - FRP (Fiberglass Reinforced Plastic). Without each other, the cured resin is brittle and the reinforcing glass is structureless. All reinforcements are categorized by their weight per square yard with the exception of chopped strand mat which is categorized by its weight per square foot.

Chopped Strand Mat

Chopped fiberglass yarn randomly oriented and held together by a binder. Easy to wet-out and contour. Minimal surface print through. Used to build up thickness in mold construction and fabrication. Most cost effective reinforcement. Requires approxiamately twice as much resin by weight to wetout properly (ie) 1.5oz CSM weighs 1.5oz/ft² and will require 3 oz of resin per ft². Note: Do not use with epoxy resin. Weights: 0.75oz, 1oz, 1.5oz, 2oz, and 3oz Widths: 38" and 60" Sold by lineal yard or by kilogram in full rolls.

Stitched Chopped Strand Mat

Chopped glass strands stitched together to form a mat. Very soft in its dry form. Excellent for closed mold processes. Epoxy compatible. Weights: 1oz and 1.5oz Width: 50" Sold by lineal yard or by kilogram in full rolls.

Surface Veil

A fine smooth mat of fine conituous yarn. Used for first or last layer with resin or gelcoat to achieve a smooth resin rich surface. Width: 38" and 50". Sold by lineal yard or 110 yd full roll.

Continuous Strand Roving

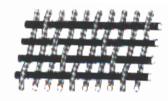
For use with chopper gun or filamant winding, please specify. Approximately 15-20 kg per ball. Available individually packaged by the ball, full skid of individual boxes or creel packed. Sold per kilogram.

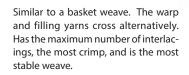
CLOTH WEAVE PATTERNS

The fiberglass is woven in a pattern that gives maximum strength yet allows it to be draped over complex shapes and allows resin to easily penetrate (also known as the ability to wet-out). The warp and fill (or weft) are the terms given to the fibers that make up the weave of the fiberglass cloth. The warp fibers are those that are oriented longitudinally or in the same direction as the length of the roll. The fill runs the width of the roll or perpendicular to the warp.



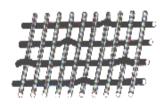
TWILL





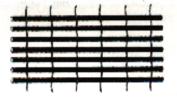
The warp and filling yarn interlacings are arranged in such a fashion as to form a distinct diagonal line (4 x 4 shown)

SATIN

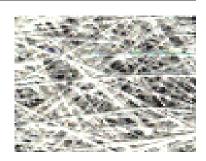


Has one warp yarn weaving over four A concentration of stronger yarns (or more) filling yarns, under one, over providing maximum strength in four, etc. Has very little crimp and hence has highest bidirectional strengths. Very drapeable. (Aircraft Cloth)

UNIDIRECTIONAL



one direction.



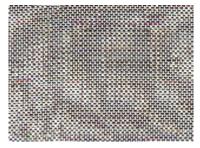


FIBERGLASS CLOTH

Lightweight Fiberglass Cloth

Lightweight cloth that has high thread count. Commonly used to reinforce a thin layer of resin that has to be smooth. Can be a replacement for gelcoat as a first layer into a mold. Widely used by model builders. Sold by the lineal yard or full roll.

Weight	Thickness	Thread Count	Min. Breaking (warp x weft)	Width Strength
		(threads/in)	(lbs/in)	
0.58 oz	1.2 mil	60 x 52	40 x 15	38"
0.73 oz	1.7 mil	56 x 56	70 x 20	38"
1.4 oz	2.5 mil	60 x 47	70 x 40	38"/50"
2.4 oz	3.2 mil	60 x 64	140 x 60	36"
3.2 oz	3.8 mil	60 x 58	125 x 120	36"



Fiberglass Cloth

Woven fabric in a plain weave. Better strength to weight ratio than mat or woven roving. Laminates thin, thus, usually used in conjunction with other reinforcements. Compatible with all resins that we supply. Sold by the lineal yard or full roll.

Weight	Thickness	Thread Count (warp x weft) (threads/in)	Min. Breaking Strength (lbs/in)	Width
4 oz 6 oz	6 mil 9 mil	24 x 22 18 x 18	148 x 134 200 x 200	25"/50" 25"/38"/50"/60"
10 oz	13 mil	16 x 14	369 x 326	38"/50"/60"

Woven Roving

Coarse fiberglass roving in a plain weave. High strength and thickness for a laminate. Laminations of woven roving to woven roving do not bond well. Always apply a layer of mat between layers of roving. Sold by the lineal yard or by kilogram in full rolls.

Weight	Thickness	Width
18 oz	23 mil	38"/50"
24 oz	39 mil	38"/50"
27 oz (2x2 Twill)	42 mil	50″

15 oz woven roving available on special order.

FIBERGLASS CLOTH

Aircraft Fiberglass Cloth

Fine bundles of fiberglass in a satin weave. Excellent drapeability, consequentially easy to form onto complex curves. Use with low viscosity resin for adequate wet-out. Sold by the lineal yard or full roll.

Style #	Weight	Thickness	Weave	Thread Count	Min. Brk Strgth	Width
120	3.2 oz	4 mils	4HS Satin	60 x 58	125 x 120	38"
7781	8.9 oz	11mils	8HS Satin	57 x 54	380 x 365	38"/50"
7715	7.3 oz	8 mils	Uni	80 x 18	450 x 80	38"
7725	8.8 oz	9 mils	2x2 Twill	54 x 48	300 x 300	38"

Tooling Cloth

Good drapeability. Primarily used in epoxy mold construction. Sold by the lineal yard or full roll.

Style #	Weight	Thickness	Weave	Thread Count	Width
7533	5.9 oz	9 mils	2 End Plain	18 x 18	38"/50"
7532	7 oz	10 mils	2 End Plain	16 x 14	38"
7500	10 oz	12 mils	2 End Plain	33 x 29	38"/50"
7544	18 oz	20 mils	2 End Plain	27 x 14	38"/50"
1597	38 oz	43 mils	Triple Plain	30 x 30	38"

Fiberglass Cloth Tape

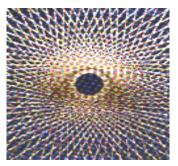
A plain weave cloth tape with finished edges. Ideal for seam work, corners, edges, and repairs. Sold by 50 yard full rolls.

Weight	Available Widths
бoz	1" / 2" / 3" / 4" / 6"
9 oz	1"/2"/3"/4"/6"
20 oz	2"/3"/6"
5.8 oz Aircraft	1"/3"/6"

Braided Cloth

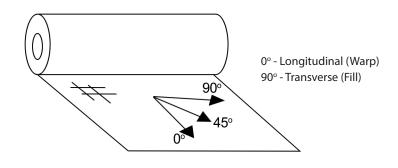
Fiberglass yarn woven into a biaxial tubular shape. Contours extremely well over custom shaped cores. Also for use over and into tubular molds. Available in a 6" width/diameter. Sold by the lineal yard or full roll.





NON-WOVEN FIBERGLASS

Fiberglass products that are stitched together, without crimped fibers. Unidirectional bundles of fiberglass are laid parallel and held together by a light stitching. They can be comprised of one, two, or three layers; unidirectional, biaxial, and triaxial respectively. These flat, non-crimped fibers yield reduced print-through, higher stiffness, higher fiber-to-resin ratio, increased drapeability, and approximately 20% tensile strength improvement over woven fabrics.



Unidirectional Fiberglass

Unidirectional fiberglass roving. Majority of material strength is in the warp direction (0°) or fill direction (90°). Sold by the lineal yard or full roll.

Weight	Uni	Width
8.5 oz	0°	12"
13 oz	Õ°	12"
15 oz	O°	50"
24 oz	O°	12"
9 oz	90°	6"
16 oz	90°	8"

Biaxial Fabric

Non-woven fiberglass yarn oriented in two layers at $+45^{\circ}$ and -45° which are held together by a light stitching. Sold by the lineal yard or full roll.

Weight	Width
9 oz	50"
12 oz	50"
17 oz	50"
24 oz	50"

Triaxial Fabric

Non-woven fiberglass yarn oriented in three layers at 0° , +45°, and -45° which are held together by a light stitching. Sold by the lineal yard or full roll.

Weight	Width
--------	-------

24 oz 50 "

Stitchmat

A biaxial fabric at 0° and 90° (BX = $+45^{\circ}$ and -45° /TX = 0°, $+45^{\circ}$ and -45°) and stitched to a light weight mat. Desired when speed in layup is required or assurance of good bond to substrate. Sold by the lineal yard or full roll (approx. 40-60kg).

Weight	Width
18 oz/0.8 oz	50"
BX12 oz/0.8 oz	50 "
BX17 oz/0.8 oz	50 "
BX24 oz/0.8 oz	50 "
TX20 oz/0.8 oz	50 "

Biaxial Fabric Tapes

Sold by the lineal yard or full roll.

Weight	Width
12 oz	4"/ 6"
BX1208	6"/ 12"
BX1708	6" / 8"

Flomat

Highly conformable closed mold reinforcing material designed for RTM, RTM-LITE and other closed mold applications. Multi layer stitched product consisting of a highly conformable needled thermoplastic core sandwiched between 2 outside layers of binderless chopped strand mat. Six available styles. Sold by the roll.

300/C/300 300/D/300 450/C/450 450/D/450 600/C/600 600/D/600

C flow media is 180 grams D flow media is 250 grams 300 grams equivalent to 1oz 450 grams equivalent to 1.5oz 600 grams equivalent to 2oz

Nexus

Polyester veil that will wet-out with polyester and vinyl-ester resins. Excellent corrosion resistance. Width is 48". Sold by the lineal yard and by the 500 ly full roll.

ADVANCED REINFORCEMENTS

	Best				Worst
Cost	E-Glass	S-Glass	Kevlar	Spectra	Carbon
Weight (Density)	Spectra	Kevlar	Carbon	S-Glass	E-Glass
Stiffness	Carbon	S-Glass	Kevlar	E-Glass	Spectra
Heat	S-Glass	E-Glass	Kevlar	Carbon	Spectra
Impact Resistance	Spectra	Kevlar	S-Glass	E-Glass	Carbon

S-Glass

S-glass has a different chemical composition from that of E-glass, eventhough, in appearance it looks very similar. One lamination of S-glass can replace several laminations of E-glass. S-glass has approxiamately 30 % more tensile strength and 15 % more stiffness than E-glass and retains these properties up to 1500°F. S-glass also has a superior impact strength. Compatible with all resins that we supply. Sold by the lineal yard or full roll.

Weight	Thickness	Weave	Thread Count	Width
1.8 oz	2 mils	Plain	57 x 56	38"
4 oz	5 mils	Plain	24 x 22	25"
4 oz	4.5 mils	Twill	56 x 56 (#1893)	60"
6 oz	9 mils	Plain	18 x 18	25" / 60"
8.9 oz	9 mils	8HS	57 x 54 (#6781)	38"
8.5 oz	- Unidirectional Hot	Melt O°	12"	

Kevlar 49

A Dupont product of aramid fibers available in an assortment of weaves. High tensile strength (43,000 psi), high tensile modulus (9,000,000 psi), high impact strength, high abrasion resistance, vibration dampening characteristics, and low specific gravity. Only compatible with vinyl ester or epoxy resins. Sold by the lineal yard or full roll.

4.5oz - Un	Thickness Weave 4 mils 9 mils 10 mils 10 mils 10 mils 14 mils idirectional Hot Melt idirectional Hot Melt	Thread Co Plain 8HS Plain 4HS Twill BX +/- O° O°	34 x 34 50 x 50 17 x 17 13 x 13 15 x 15 15 x 15	Width 50" 38" 50" 58" 50" / 60" 58" 58" 30" 12" 60"
4.502 - Un 8 oz - Kev		0°		12 60″

Kevlar Tape

Kevlar tape with finished edges. Ideal for seam work, corners, edges, and repairs. Available in 1.8oz and 5oz weights and 1", 2", 4", and 6" width. Sold by the lineal yard or 50 ly full rolls.

Spectra

Ultra high molecular weight polyethylene with low specific gravity, high strength, high energy to impact, and high abrasion resistance. Low melting point of 150°C. Tenacity and modulus decrease at higher temperature but increase at lower temperature. Available in a 2.3oz plain weave cloth 60" wide. Sold by the lineal yard or full roll.

Zylon

Chemical make up is PBO. High strenghth and toughness. Available in a 4 oz plain weave cloth 60" wide. Sold by the lineal yard or full roll.

Quartz

Woven from a yarn made up of highly pure (99.9%) quartz crystals. High temperature resistance. Softens at approx. 1500°C. Tensile strength approxiamately equal to E-Glass. Very low coefficient ot linear expansion. Often used in ablative aerospace applications. Available in a 1.8oz and 4oz plain weave cloth 38" wide. Sold by the lineal yard or full roll.

CARBON FIBER

Carbon Fiber

Fine yarns of carbon fiber available in an assortment of weaves. High stiffness (Tensile Modulus = 33,000,000 psi), high tensile (450,000 psi) and compressive strength. As an approximation, one laminate of carbon fiber will replace three laminations of fiberglass. Easy to cut. Wet-out and handling properties are similar to fiberglass. Compatible with vinyl ester and epoxy resin. Sold by the lineal yard or full roll.

	Weight	Thickness	Weave	Fiber	Construction (threads/in)	Width
	2.8 oz	4 mils	Plain	1K	18 x 18	39 "
	3.8 oz	5 mils	Plain	1K	24 x 25	42 "
	5.7 oz	7 mils	Plain	3K	12.5 x 12.5	50 "
	5.7 oz	7 mils	Twelvetex	12K	3 x 3	50 "
	6.0 oz	7 mils	4x4Twill	3K	13 x 13	50 "
	6.2 oz	7 mils	2x2Twill	3K	13 x 13	50 "
	8.3 oz		5HS	6K	17 x 17	50 "
	10.9oz	20 mils	8HS	3K	24 x 23	42 "/60"
	19.8oz		2x2Twill	12K	11 x 11	50 "
IM7	5.5 oz		4HS	6K IM7	11 x 11	50 "
IM7	6.0 oz		4HS+/-45°	6K IM7	12 x 12	50 "

Kevlar-Carbon Hybrid

Kevlar and carbon combined in one cloth. The best of both worlds; the stiffness and strength of carbon and impact toughness of kevlar. Carbon fiber runs in the 0° direction while kevlar is oriented in the 90° direction. Sold by the lineal yard or full roll.

Weight	Width	Weave
6 oz	50"	Plain (Yellow/Black)
6 oz	50"	Twill (Red/Black)

Carbon Tape

A plain weave carbon tape with finished edges. Sold by the lineal yard or 50 ly full roll.

Weight	Width
бoz	2"
6 oz	6"

Unidirectional Carbon

Unidirectional carbon fibers running in the warp direction (0°). Stiffest form of reinforcement. Carbon is held in place by sparse hot melt fill fibers bonded to the carbon. Will not unravel when cut down to narrower widths. Sold by the lineal yard or full roll.

Weight	Width
4.5 oz	12"
6 oz	12"
9 oz	12"
11 oz	12"

Carbon Tow

Continous strand carbon fiber. Fiber size available is 12K and 50K. Sold by the lineal yard or by the lb in a full spool.

Biaxial Carbon

Two layers of stitched carbon oriented at + 45° and -45°. Heavier weights and triaxials available by the roll. Sold by the lineal yard or full roll.

Weight	Width
9 oz	50 "
12 oz	50 "

Braided Carbon Fiber

Available in a tubular format. See Braided Fiberglass. Sold by the lineal yard or full roll.

Width	Weight
0.5 "	11.0 oz
1"	11.0 oz
3"	11.0 oz
4"	11.0 oz
5"	11.0 oz
6"	11.0 oz

Carbon Veil

A fine smooth lightweight mat of thin short carbon fibers. Compatible with both vinyl-ester and epoxy resins. Sold by the lineal yard or full roll.

Weight	Width
0.5 oz/yd ²	38"

PUTTY

>> see other putty in marine section



Full line of ATC products available

ATC Poly-Fair F26

Water resistant and lightweight polyester-based fairing compound for marine and tooling industry. Good adhesion to polyester and vinylester substrates. Low shrinkage, hard cured surface and tough but easily sandable. Holds solid feathered edge. Colour is light pink.

Available sizes: Gallon, 5 Gallon. Hardens with MEKP Hardener.

Working time = 3-5 min

ATC Corebond B70

Lightweight polyester-based core adhesive for foams and balsa. Suitable for both hand-layup and vacuum bag core installation. Non-sagging, low shrink with good elasticity for bedding compound. Hardens with BPO paste. Available size: 5 Gallon.

Working time = 50-55 min @ 3% ATC BPO/5

ATC Polybond B86 F

Transluscent green, all-purpose fiber reinforced high strength repair compound. Gel time of 11-18 minutes. Hardens with MEKP. Available sizes : Gallon, 5 Gallon.

PTM&W Poly Filler HT

Developed for use in tooling, fabrication and repair for aerospace industry where elevated temperatures may occur. Low moisture absorption also makes this an ideal filler/repair material for the marine industry. Excellent bond strength to fiberglass, SMC, BMC, RIM, FRP composites, as well as most other substrates. Accepts all types of coatings without staining. 4-6 min working time. Available in grey or black. Withstands 446°F. Available sizes: Quart kit, Gallon kit.

3M Lightweight Body Filler

This vacuum processed lightweight body filler is designed to be used for filling and shaping prototypes and plugs. Cures tack-free in 15-20 minutes, reducing sandpaper loading. Other important advantages are; creamy texture, smooth spreading, easy sanding, and vacuum processed to minimize pinholes. Note: Not suitable below the waterline. *3M Creme Hardener* included. Available sizes: Gallon. Case of 4 Gallons.

3M Premium Lightweight Filler

Very easy sanding vacuum processed lightweight body filler. Cures tack-free in 15-20 minutes. Ultra creamy and for a polyester based product has superior bonding to fiberglass, SMC, aluminum, galvanized, and steel. Note: Not suitable below the waterline. *3M Creme Hardener* included. Available sizes: Gallon, Case of 4 Gallons.



Duratec Mold Repair Putty 1804-007

Smooth and thixotropic vinylester putty for fast and easy repair of rebuild of production molds. Extremely low load of ultrafine fillers reduces entrapped air. Cures to a durable and easily polished surface. Sandable within 30 minutes. High heat distortion properties withstands exotherm during part cure. 6-8 minute working time. Untinted in colour. Withstands 300°F. Hardens with 3% BPO paste catalyst. Available size: Quart.

Aeropoxy Light Filler

A two component epoxy fairing and filling material. Exceptionally light weight at only 4 lbs/gallon. Smooth thixotropic texture for holds a fine feather edge, yet will not sag in thick sections. *Aeropoxy* light is a non-toxic material, with no hazardous or restricted materials in the resin or hardener. Flexibilty,

excellent adhesion, and non corrosive nature lead to very good bond line stability and long term durability. Colour coded, 2:1 mix ratio. Cures to tan colour. Available sizes: 1.5 Quart kit, 1.5 Gallon kit, 7.5 Gallon kit.

> Working time @ $22^{\circ}C = 25-30$ min Time to shape @ $22^{\circ}C = 2-3$ hrs Time to sand @ $22^{\circ}C = 5-6$ hrs

System Three Quickfair[™]

A System Three lightweight, microballoon filled, fast-curing two-part epoxy fairing putty with excellent moisture resistance. In marine applications, designed to be used above and below the waterline. Outstanding bond to FRP, wood, and metals. Vacuum proc-



essed to minimize pinholes. Non-sagging, butter-like consistency that sufficiently cures to be hand-sanded in 5 hrs and machine sanded in 6 hours. Weight is 5.7 lbs per gallon. Cures brown.

Available sizes: 1.5 Quart kit, 1.5 Gallon kit, 7.5 Gallon kit. Working time =10 min @ 22°C.

Nidacore Transom Compound

Polyester-based pourable transom casting compound. Good bond with original polyester sustrates. High compressive strength and good rigidity. Hardens with MEKP Hardener. Available size: 5 Gallon.



RESIN ADDITIVES

Polyester Pigments

Colour paste pigments used for tinting polyester and vinyl ester resins and gelcoats. Add no more than 10% by weight. The stock colours are: white, black, grey, gold oxide, tan, brown, dark brown, orange, candyapple red, red, dark red, yellow, canary yellow, dark green, and dark blue. See front colour card for approximate colours. Available sizes: 50 mL, 250 mL, Liter, Gallon

Epoxy Pigments

Colour paste pigments used for tinting epoxy resins. No UV filters - epoxy must be topcoated with UV barrier. Add no more than 5 % by weight.

Primary colours available. Available sizes: 4oz, Quart

Air Dry

Waxed solution added to unwaxed polyester and vinyl ester resins and gelcoats to acheive a tack-free surface suitable for sanding. Commonly used in final coat. Add 3 % by volume. Available sizes: 350 mL, Liter, Gallon, 5 Gallons

Cobalt 6 %

Added to unpromoted vinyl ester resins to customize curing time. Present in all polyester resins but can be added to accelerate both gel time and curing time.

IMPORTANT: Keep away from direct contact with MEKP - violent reaction will occur.

Available sizes: 50mL, 250 mL, Liter, Gallon, 5 Gallons

DMA

Added to unpromoted vinyl ester resins to customize curing time. Present is all polyester resins but can be added to accelerate gel time to avoid slumping but allows for a longer curing time to minimize shrinkage. Available sizes: 50mL, 250 mL, Liter, Gallon, 5 Gallons

DEA

Added to polyester and vinyl ester resins to speed up total cure time without changing the working time. Available sizes: 50 mL, 350mL, Liter, Gallon, 5 Gallons

BYK S-750 Styrene Suppressant

Styrene suppressant additive (styrene is the chemical that gives polyester resin its distinctive odour). Reduces styrene emissions by 70-90 % in polyester and vinyl ester resins without affecting bonding strength of subsequent layers. Not recommended for clear casting resins. Add between 0.3 to 1.0 %. Colour is white. Available sizes: 50 mL, 250 mL, Liter, Gallon

BYK A-555 Air Release Additive

Increases rate of deaeration in resin/gelcoat so that most air can escape before gelation occurs. Recommended for clear casting resin where minimal haziness is desired. In surface coatings, minimizes porosity in surface thus improving weathering properties. Add between 0.2 and 1.0 %. Colour is clear. Available sizes: 50 mL, 250 mL, Liter, Gallon

BYK A-560 Wetting Agent

This silicone-free additive combines very good air release effect with good fiber wetting. Recommended for all fiberglass reinforced polyester and epoxy applications. Add between 0.2 and 0.5%. Available sizes: 50 mL, 250 mL, Liter, Gallon

BYK 066 Defoamer

Highly efficient defoamer. Provides good surface tension reduction for better flow and leveling. Improves wet out properties. Suitable for a wide range of two-component chemistry including epoxies. Add between 0.2 and 1.0 %. Colour is clear. Available sizes: 50 mL, 250 mL, Liter, Gallon

Styrene

The base for polyester and vinyl-ester resins and gelcoats. Can be used as a thinner for these products. Add up to 5 % by volume. Also used as a surface prep for polyester resin repair. Available sizes: 350 mL, Liter, Gallon, 5 Gallons

FILLERS

The purpose of adding fillers to resins is to customize the resin for a specific application. The most common applications are filling, bonding, and sanding. For these applications, a resin of "syrup-like" consistancy can be mixed into a putty of "peanutbutter-like" consistancy by adding the appropriate fillers. When laminating with a resin on a vertical surface, one might add a pinch of filler to prevent excessive sagging. When casting, add fillers to increase or decrease weight and dramatically lower the price of raw materials.

Cabosil

Low density filler made of fumed silica powder. Thickens all resins and gelcoats and adds good anti-sag properties when working on vertical surfaces. Excellent bonding and abrasion resistance



qualities. Difficult to sand. Particles are easily airborne. Avoid inhalation by wearing proper respirator mask. Available sizes: Liter (40 grm), Gallon (0.15 kg), 5 Gallon box, 10 lb bag (4.54 kg)

Cabosil TS-720

Hydrophobic fumed silica powder. Will not absorb moisture. Available sizes: Liter, Gallon, 10 lb bag

3M Microballoons - K20

Low density microballoon spheres when mixed with a resin system make putties that are easy to sand. Poor anti-sag properties. For sanding putty on a vertical surface mix 4 parts microballoons and 1 part cabosil. Colour is white. Available sizes: Liter (100 grm), Gallon (0.40 kg), 5 Gallon box (2.0 kg), 65 lb box (29.5 kg)

3M Microballoons - K1

Same properties as K20 microballoons with approximately half the density and half the strength. Very easy sanding. Creates very lightweight sanding putty. Available sizes: Liter (60 grm), Gallon (0.25 kg), 5 Gallon box (1.25 kg), 40 lb box (18.2 kg)

Phenolic Microballoons

Serves the same purpose as 3M Microballoons with slightly different sanding characteristics and higher shear strength. Available sizes: Liter (90 grm), Gallon (0.35 kg)

Talc

Economical filler. Makes sanding putty. Available sizes: Liter (0.700 kg), Gallon (2.5 kg), 50 lb bag (22.7 kg)

Snowhite 12

Inexpensive filler for casting resin. Add up to 60% by weight. Due to its high density, gives castings a heavy, 'stone-like' feel. Available sizes: Gallon (4.4 kg), 50 lb bag (22.7 kg)

Milled Fibers

High density short glass fibers. Fiber length is available 1/8" and 1/32". Makes jelly-like putty with high shear strength. When used in conjunction with cabosil creates structural putty with excellent bonding strength. Available sizes: Liter, Gallon, 50lb Bag

Chopped Strands

Glass fibers (6mm, 12mm, and 24mm). Makes a coarse high strength filler. Also used in very intricate areas of molding surfaces where layup with cloth or chopped strand mat is difficult. Available sizes: Liter, Gallon, Box

Milled Carbon Fibers

Carbon fibers at approximately 1/32". Makes exceptionally strong putty. Cured putty or casting is black and conductive. Available sizes: Liter (0.35 kg), Gallon (1.4 kg), 50 lb box (22.7 kg)

Cotton Fibers

High strength and low density cotton fibers make a strong and light weight smooth putty. May require crumbling before mixing into resin. Available sizes: Liter (180 grm), Gallon (0.650 kg), 50 lbs bag (22.7 kg)

Wood Flour

Makes non-sagging firm paste. When mixed with epoxy it is used for gap filling and making fillets in bright finished sewn boats and strip planked canoes. Available sizes: Quart, 5 Quart.

ATH

Alumina Trihydrate is a flame retardant additive used widely that can accept filler. It's used in applications where acid resistance is needed. ATH is approximately one-third chemically combined water, which begins to be released at 220° C. Availables sizes : gallon, 50 pounds bag, pallet.

Pulpro: 3 & 8

Pulpro is a near white calcium carbonate design for use as a resin filler in pultrusion and/or in fiberglass manufacturing. Pulpro 3, a three micron calcium carbonate. Pulpro 8, an eight micron calcium carbonate. Available sizes : gallon, 50 pounds bag, pallet.

CATALYST

MOLD RELEASES





MEKP Hardener

Methyl Ethyl Ketone Peroxide liquid hardener for polyester and vinyl ester resins, gelcoats, and *Distribution Composites putties*.

QuantitesCorresponding ResinAvailable quantity @ 1% mix15 mLLiter50 mLGallon250 mL5 gal500 mL10 gal8 lbs(gal)70 gal

Hi-Point 90 / Quickset / DDM-9 /DDM-30 / DHD-9 / 224

Methyl Ethyl Ketone Peroxide hardeners. Available size: 8lbs (gal)

BPO Hardener

Benzyl Peroxide creme hardener. White in colour. Available sizes: 4 oz, 500 mL, Liter, Gallon.

SOLVENTS

Acetone

Pure non-recycled Acetone. Used for clean-up of uncured resins on brushes and tools.

Available sizes: Liter, Gallon, 5 Gallon, 45 Gallons(subject to \$65 drum deposit).

NOTE: Do not apply directly onto skin. Without gloves or barrier cream your skin will easily absorb acetone and the resins that it has dissolved. Use *Power Maxx* hand cleaner for skin clean-up.

Methylene Chloride

Strong solvent used for clean up of uncured epoxy resin. One of the active ingredients in paint remover. Handle with care! Availble sizes: 350 mL, Liter, Gallon, 5 Gallon.

Gunwash Solvent

A blend of organic and inorganic solvents used to clean spray equipment after using hard to clean polyurethane paints and epoxy primers. Available sizes: Gallon, 5 Gallon.

Styrene

The base solvent for polyester resin, vinyl-ester resins, and gelcoats. Can be used as a thinner for these products. Add up to 5 % by volume. Also used as a surface prep for polyester resin repair. Available sizes: 350 mL, Liter, Gallon, 5 Gallon.

Xylene

Common solvent for thinning epoxy based primers. Available sizes: Gallon, 5 Gallon.



Full line of AXEL products available

TR-104 High Temp Mold Release

High temperature production paste wax. Excellent break down for fast even coverage. Allow to dry before removal. Less wax build-up than conventional synthetic or paraffin releases. Compatible with PVA. Available sizes: 14oz, Case (12 cans).

TR-301 Sealer

A liquid sealer recommended to be used on new or reconditioned tooling before waxing with TR-104. Improves release and quality of finish by sealing surface pores. Best results obtained by machine buffing. Available sizes: 350 mL, Quart, Gallon, Case (4 Gallons).

TR-210 Self-Stripping Wax

A liquid release that strips previous wax build upon application while a leaving an effective thin release film. Ideal for textured surfaces. Note: Liquid mold release is recommended for use on fully cured, well conditioned molds only. Available sizes: Gallon, Case (4 Gallons).

TR-502 Wax Build-up Remover

A special chemical formulation with no abrasives or compounds. Used in a good mold maintenance program, it will assure high gloss finished molds. Designed to be used with a machine buffer at the sign of haze or wax buildup. Will not break the surface seal. Available sizes: Gallon, Case (4 Gallons).

Sheet Wax

Conformable transparent sheet of wax at 0.010'' (10 mil) thickness. Softens at approximately 170°F. Pressure sensitive adhesive backing. Sheet size $24'' \times 48''$. Sold by the sheet or box (10 sheets).

Silicone Release Sheet

A reuseable fiberglass reinforced silicone rubber release sheeting. Excellent release properties from the most aggressive resin sytems. Thermally stable up to 650°F. Note: All silicones can transfer. Sold by the lineal yard.

Teflon Release Film

A reuseable fiberglass reinforced teflon release sheeting. Thermally stable up to 550F. Width: 48". Sold by the full roll of 18 ly.

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MOLD RELEASES

TR-905 Mold Prep Cleaner

A blend of solvents and cleaning agents to be used before applying the TR-910 Sealer. Use as cleaner for new or reconditioned molds.

Note: If converting a previously paste waxed mold to a semi-permanent system, only cleaning with TR-905 or any other solvents/cleaners is inadequate. The previously waxed surface must be sanded and/or compounded prior to meticulously cleaning with TR-905. Available sizes: Gallon, Case (4 Gallons).

Airtech Safelease 30

A water based PTFE release agent from *Airtech* that contains no silicone. Can be used for cure cycles up to 450°F. For use with composite and metal tools; provides release from most resin systems. Does not attract moisture after cure, so will not produce steam during an oven cure. Unlike other water based mold releases, can be used on composite molds without need of a sealer. One coat allows multiple releases. Available size: Gallon, 5 Gallon.

Airtech Release Off 826

Water based release agent remover. Will remove all release agents, silicone and non-silicone. Will not destroy composite tool surfaces. Rub on with a sponge and wipe clean with a damp cloth. Available size: 16 oz.



Frekote 700-NC

An excellent general purpose mutiple pull semi-permanent release coating. Mutiple releases per application for polyester, vinylester, epoxy, rubbers, thermoplastics and most other molded polymers. Cured thermal stability of 750°F. Can be applied by spraying, brushing or wiping with lint-free cloth such as **Wypall X70 Rags**. Available sizes: Aerosol (10.5oz), Case (12 cans), Pint, Gallon.

Frekote 770-NC

A low odor, fast evaporating version of Frekote 700-NC. Well suited for tougher to release processes such as filament winding and non gelcoated polyester and fiberglass molding. High gloss and high slip. Cured thermal stability of 750°F. Available sizes: Aerosol (10.5oz), Case (12 cans), Pint, Gallon, 5 Gallon.

Frekote Frewax

A unique combination of wax and semi-permanent polymer release agent. By incorporating a wax into the formulation, a visible film is produced that enables easy, user-friendly application and complete mold coverage. Frewax leaves a high-gloss film capable of many releases before reapplication is necessary. Available sizes: Pint, Gallon.

Frekote FMS Sealer

The recommended sealer on polyester and epoxy molds before applying Frekote semi-permanent releases including the Frekote 700NC. This sealer must be used when using green or new molds as well as when sealing older molds with micro-porosity and other slight surface imperfections. High gloss surface. Apply by hand using clean, lint-free cloth, such as **Wypall X70 Rags**. Available sizes: Pint, Gallon.

Frekote B-15 Sealer

Formulated as a sealer for metal molds with micro porosity problems, small surface scratches or imperfections. Used in conjunction with other Frekote products, B-15 provides an excellent base coat enhancing the release advantages offered. Available sizes: Pint, Gallon.

Frekote PMC Mold Cleaner

Special blend of solvents designed to dissolve and remove wax from polyester, epoxy and metal molds. Recommended for preparing olds before applications of Frekote sealers and mold release agents. Available sizes: Pint, Gallon.

Frekote WOLO

WOLO[™] is a unique, polymer release agent that cures quickly and provides multiple release of all polyester resins. Applications and use of a release agent has never been easier, simply wipe on and leave on to produce a high gloss finish with no need to polish.

Wypall X70 Rags

A Kimberely Clark premium lint-free wipe ideally suited for applying of mold release products and recommended by Loctite for their Frekote line of products. Sold by the box of 100 wipes.

CORE MATERIALS

Core materials are most commonly used in "sandwich construction" to build up thickness and hence rigidity in the wall of a fiberglass structure. This is simply accomplished by laminating fiberglass skins onto exposed sides of the core material. This gives the effect of an I-beam where the fiberglass skins take most of the tensile and compressive loads. If a strong rigid wall is required, core materials reduce the cost, weight, and labour over multiple glass/resin laminations. All our cores are compatible with polyester, vinyl ester and epoxy resin.

Property	Unit	Balsa Core	Divinycell	Airex	Last-A-Foam	Nida Core	Matline *impregnated with polyester resin
Density	lb/ft ³	9.5	5.0	5.5	4.5	4.8	34 to 50
Tensile Stength	psi	1900	320	260	120	72.5	420
Tensile Modulus	psi	n/a	11,600	9,280	3,900	43,575	68,000
Compressive Strength	psi	1870	175	130	95	200	3200
Compressive Modulus	psi	590,000	12,300	8,100	2,600	2,175	29,000
Shear Strength	psi	432	145	170	80	70	580
Shear Modulus	psi	23,000	4,500	3,000	1,000	1160	9,900
Shear Elongation	%	n/a	n/a	80	n/a	n/a	n/a
Impact Strength	ft lb/in ²	n/a	n/a	2.4	n/a	n/a	n/a
Max. Process Temp	°F	n/a	176	n/a	n/a	n/a	n/a

Core Properties



Divinycell

Cross-linked poly-vinyl chloride core foam. Wide range of densities available. Standard density is 5 lbs/ft³. Alternate densities of 3-12lb/ ft2 available by full case. Standard rigid sheet size is 48"x48" or 48"x96". Standard contoured sheet size is 32"x48". Thickness: 1/8", 1/4", 3/8", 1/2", 3/4", 1". Sold by the sheet or full case,

Note: Other Diab products available by the case are Divinycell HT, Divinycell HDT, Kledgecell, and ProLamina products.

Divinymat

Divinycell PVC foam core with a finely scored contour grid pattern and fiberglass scrim for backing. Excellent conformity. Well suited for resin infusion. Sheet size: 32x48". Thickness: 3mm, 5mm. Sold by the sheet or full case.

Renicell E

High-density polycarbamate foam, for high compressive properties with excellent static mechanical properties. Available densities are 15 and 20lbs/ft³. Sheet size: 48" x 96". Sold by the full case.

Contoured Balsa Core

End grain balsa wood cut into 1 inch squares with a fiberglass scrim for backing. Sheet size is 24"x 48". Thickness: 1/4", 3/8", 1/2", 5/8", 3/4", 1". Sold by the sheet or full case.

Durakore & Balsa Panels

Fiberglass/polyester skinned balsa panels.

Matline

A non-woven polyester product designed as a semi-absorbent resin core. Width: 39". Thickness: 1mm, 2mm, 3mm, 4mm, 5mm. Sold by the lineal yard or full roll.

Nida-Core H8PP

Polypropylene honeycomb with an impermeable felt-like scrim thermofused to the surface. Standard sheet size 48"x84". Thickness: 1/2", 3/4", 1", 1.5". Finished sheets also available with fiberglass/polyester or mahogany skins. Sold by the sheet or full case.

URETHANE FOAM

Urethane Foam

Solid chemically resistant pink closed cell foam (2lbs/ft³). Used most commonly as a carving and shaping media for plug construction. Easily manipulated with woodworking tools. Do not use hot wire as it will give off toxic fumes. Urethane foam offers an insulation rating of R7 per inch of thickness. Sold by the sheet. Sheet size: 48"x 48" and 48" x 96" Thickness: 3/4", 1", 2", 4", 8",12" Note: Other thicknesses available on request

Pour-In-Place Polyurethane Foam

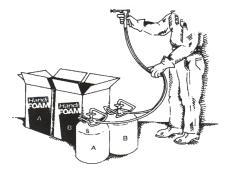
A two part liquid system that creates a rigid chemically resistant closed cell foam. Ideal for pouring into cavities since it expands into available space. Adheres to all cured resins and a variety of other substrates including itself. Insulation rating of R7 per inch. Maximum foaming occurs when the two components are well mixed at a temperature of 24°C. Otherwise in cooler temperatures it cures to a higher density with a denser rind (skin). Available xizes: Litre kit, 2 Litre kit, 2 Gallon kit, 10 Gallon kit, 90 Gallon kit (475 kg).

1.3 lb/ft ³	The most economical foam.
2 lb/ft ³	The most popular density. Used as floatation in boat construction (provides 60 lb of buoyancy per cubic foot). Foam of choice for shaping.
4 lb/ft ³	Increased compressive strength over 2 lb density. Popular with taxidermists.
6 & 10 lb/ft ³	Used in more specialized pattern work.

	Foam Yield	(ft³)		
Quantity	1.3 lb	2 lb	4 lb	6 lb
1 L kit	1.5	1	0.5	0.3
2 L kit	3	2	1	0.7
2 gal kit	12	8	4	2.8
10 gal kit	60	40	20	16
90 gal kit	550	360	180	140

Froth-Pak[™] Sprayable Polyurethane Foam

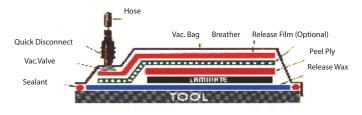
Almost identical physical properties to the pour-in-place version. The main difference being that the foaming begins only a few seconds after the two components are mixed. Kits come in pressurized non-flammable containers with hoses leading to a gun and a mixing helix nozzle. Cures in minutes. Foam density is 1.7 lb/ft³. Lower densities also available. All kits come with a gun. Available sizes: 2 Pint kit, 4 Gallon kit, 10 Gallon kit.



Product Code	Kit Size	Foam Yield (ft ³)	Kit Description
II-12	2 pint kit	1	(2 nozzles)
II-200	4 gallon kit	17	(7.5ft hose + 10 nozzles)
II-600	10 gallon kit	50	(15ft hose + 10 nozzles)

VACUUM BAGGING SUPPLIES

Vacuum bagging is a laminating process used to decrease the amount of excess resin, minimize air pockets, and help conform materials to shapes more effectively.



Vacuum Bagging Film WL6400 / WL7400

A high quality transparent gold (WL6400) and transparent green (WL7400) in color co-extruded nylon 6 films. Used in applications where softness, workability and pin-hole free film is essential. Maximum service temperature is 350°F(WL6400) and 400°F(WL7400). Width: 60 " Note: Film loses softness after being stored in dry environment. Solution - Place in a plastic bag and steam so that the film can absorb moisture and retain its softness and pliability. Sold by the lineal yard and full roll (333 ly).

Econolon Bagging Film

An economical 1.5 mil nylon film good for room temperature cures. Maximum temperature is 250°F. Colour is clear. Width 60"/ 120"CF. Note: Film loses softness after being stored in dry environment. Solution - Place in a plastic bag and steam so that the film can absorb moisture and retain its softness and pliability. Sold by the lineal yard and full roll (333 ly).

Stretchlon Vacuum Bagging Film SL-200

A very stretchy 1.5 mil film that will contour in and around many compound curves without the need to pleat. 600% elongation with memory. Maximum temperature is 250°F. Colour is green. Width: 60". Sold by the lineal yard and full roll (333 ly).

Stretchlon Vacuum Bagging Film SL-800

A very stretchy 2 mil film that will contour in and around many compound curves without the need to pleat. Over 400% elongation. Maximum temperature is 400°F. Colour is orange. Only sold by the full roll (333 ly).

Peel Ply J / Peel Ply C

A 2 oz smooth nylon fabric that has been scoured and heat set so that it is contaminant free and will not shrink during the curing process. Colour is white. Width: 60". Sold by the lineal yard and full roll (J=100 ly, C=250 ly).

Peel Ply F / Econostitch

A 3 oz moderately coarse nylon fabric that has been scoured and heat set so that it is contaminant free and will not shrink during the curing process. Excellent for secondary bonding. Colour is white. Width: 60". Sold by the lineal yard and full roll (F=250 ly, Econstitch=100 ly).

Bleederlease B / Econolease

A 2 oz smooth nylon peel ply with a special release coating which makes removal easier. Colour is green and blue respectively. Width: 2", 5", 60". Sold by the lineal yard and full roll (100 ly).

Airweave N4 / N7 / N10

A 4oz, 7oz or 10oz stretchable non-woven polyester felt with drapeability enabling it to easily conform to contours. Multi-directional stretch, combined with low density lightweight construction makes for highly efficient bleeder or breather. N-4 will conduct air @ 85 psi (5.9 bars). It does not contain any binder which could close off air-flow. Maximum service temperature is 400°F. White in colour. Width: 60 ". Sold by the lineal yard and full roll (N4=100 ly, N7/N10=50 ly).

Econoweave 22 / 44 / 1010

An economical 20z, 40z, or 10oz stretchable non-woven polyester felt that is suitable for as a breather or bleeder in non-autoclave cures. Maximum service temperature is 375°F. Green in colour. Width: 60". Sold by the lineal yard and full roll (22/44=100 ly, 1010= 50 ly).

Vacuum Bagging Sealant AT-200Y

Industry standard compound for providing a tight seal and clean release of vacuum bag. Will bond to any tool surface. Suitable for applications of temperatures up to 400°F. Colour is yellow. Roll size: 1/2" x 1/8" x 25'. Available by the roll or case (40 rolls). Also avaialble: Vacuum Bagging Sealant GS-100 - 375°F/Brown Vacuum Bagging Sealant GS-213 - 400°F/Cream

Release Film 5200R

A high heat and high elongation release fabric with universal non stick properties. Good drapeability at a thickness of 1 mil. Maximum temperature is 600°F. Red or blue in colour. Available perferated and non-perferated. Width: 48". Sold by the lineal yard or full roll (167 ly).

Release Bag RBG-125

A room temperature release film that can also be used as a vacuum bag. Use perforated over laminate to control resin bleed and/or help release peel ply in problem areas. Thickness: 1 mil. Maximum temperature is 285°F. Green in colour. Width: 60". Embossed product allows bleed when used as vacuum bag. Available perferated and non-perferated. Sold by the lineal yard or full roll (667 ly). Embossed product is only sold non-perferated by the the full roll (167 ly).

Airtac 2

A spray rubber adhesive designed for temporary bonds. Can be used on materials needing extra tack for placement on vertical or difficult surface areas. SCRIMP and VARTM process rely on Airtac 2 for holding plies in place until resin infusion is completed. Sold by the aerosol can (16.5oz) and case (12 cans).

> **Economical Room Temperature System** Vacuum Bag =Econolon Peel Ply = Econstitch or Peel Ply J Breather =Econoweave 44 Sealant Tape = AT-200Y

VACUUM PROCESSING

Resinflow 60

Designed to speed surface resin flow during vacuum assisted resin infusion processes. Does not fray when cut, works well with most resin systems. 60" roll width. Red in colour. Sold by the lineal yard and 350' roll.

Greenflow

A resin distribution medium similar to Resinflow 60 but with a more three dimensional shape for faster resin flow. 48" Roll width, Green.

¹/₂" Poly tubing

An inexpensive plastic tubing for both resin and vacuum line setup when performing vacuum assisted resin infusion. Sold by: Roll of 100'.

1/2" Spiral Tubing

Used under a vacuum bag during resin infusion techniques, this tubing can be used for both perimeter vacuum lines and accelerated resin distribution channels. Sold by: Roll of 100'.

1/2" Barbed fittings

"T's", Elbows and Straight Connectors used with 1/2" poly tubing. Sold individually.

Omegaflow

An "Omega" shaped reusable resin distribution system used with iresin infusion techniques. Use on top of the laminate for stable resin distribution with a minimum of print onto the part. Available in vinyl heat resistant silicone rubber. Sold by the lineal foot.

Vacuum Leak Detector

A portable, economical leak detector for finding leaks in vacuum bags, sealant tape, hoses and fittings. Visual display, adjustable range can filter out ambient noise. With included headphones can convert ultrasonic leak sounds into an audible range.

Airtac II

A spray rubber adhesive designed to tack fabrics and process materials in place before vacuum is applied during resin infusion molding. Also useful for temporary detail and pattern placement in the tool shop. Sold by: Aerosol can and Case of 12 cans.

Enkafusion 7001 Flow Media

A two-dimensional nylon matting consisting of randomly oriented, fused and entangled filaments. The unique, open structure of the matting expedites the flow of resin and creates a separation layer when placed between fiberglass. The "flat" nature of this product keeps resin content to a minimum while enhancing resin flow. Sold by the full roll.

Enkafusion CX1000 Flow Media

A nonwoven polyester filter jacket and a three-dimensional "V" shaped polyester core. The unique "V" shaped structure creates an open channel for resins to race through while maintaining high compression resistance under load. Takes the place of traditional resin flow channels to make a fast, cost effective distribution network. Sold by the full roll.

Aluminum Vacuum Valve

A two piece vacuum valve which requires one quarter turn to lock into place. Maximum service temperature is 500°F. 1/4" NPT. Rectangular Base available.

Quick Disconnect Set

A two piece male/female quick disconnect. Maximum temperature is 500°F. 1/4" NPT.

Flash Tape I Econobreaker 1"and 2" x 2mil x 72yds 1"and 2" x 2mil x 72yds

Venturi Vacuum Generator

Generates a vacuum of up to 22"Hg.

Busch Vacuum Pump 021

Busch oil sealed rotary vane vacuum pumps are single stage, aircooled, and direct driven. This oil-recirculating design is quiet and one of the most reliable vacuum pumps available. 15 CFM, to 29.3"Hg. The standard in composite vacuum pump design.



An oil sealed, 2 stage pump. Very good value. No oil filter on the exhaust so use with caution at laminating stations. 4CFM at 28CFM. Refurbished models available.

Gast Vacuum Pumps 0523

Dry rotary vane pump. Operating volume of 4 ft³/min at 24 inches of mercury. Refurbished models available.

Vacuum Gauges

Liquid filled gauges. 1/4" NPT male.

Digital Vacuum Gauge

Traceable Digital Vacuum Gauge accurate to 1% fullscale plus 1 digit. Serial RS-232 output allows it to be connected to a computer or data logger for monitoring and keeping results. To assure accuracy an individually serial-numbered Traceable® Certificate is provided from ISO 17025. It indicates traceability to standards provided by NIST. Memory keys and data hold buttons. Transducer has 1/4 inch NPT male-threaded stainless-steel end. Cable is 40 inches. Accurate to 0.05" Hg.



West Vacuum Bagging Starter Kit

Venturi vacuum generator, vacuum gauge, muffler, tubing, suction cups, 15 ft² of materials and booklet.

Vacuum Bagging Booklet

Published by Gougeon Brothers.

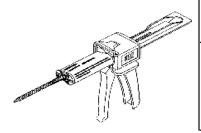






STRUCTURAL ADHESIVES

Bond Performance



Adhesive	Elongation (%)	Overap/Tensile Shear Strength*(psi)				
	(90)	Alum.	Steel	Fiberglass	Acrylic	ABS & PVC
DP-8005 DP-810 DP-190 H3000 H8000 MGS 135 T-88	5.3 NA NA NA NA 7.5	2,150 3,600 2,550 2,360 3,000 3,100 - 4650 2,000	2,150 3,100 1,650 3,830 3,500 3,100-4,650 1,800	2,370 1,650 1,590 1,740 1,600 2,300-3,100 2,800	SF 1,100 960 NA NA NA NA	1,540 600 880 2,510/1,550 460/1,740 NA SF

* 3M Products are overlap shear results, all others are tensile shear. NA = Not Available

SF = Stock Failure

3M DP-8005 (10:1)

This acrylic-based adhesive has the best ability to bond many low surface energy plastics. In addition, it will bond other plastics, steel, aluminum, glass and wood. Good resistance to water, humidity, and corrosion.

Availbable size: 35ml cartridge Work Time = 2.5 min Fixture Time = 120 min

3M DP-810 Low Odour (1:1)

This acrylic adhesive emits little odour. It bonds a wide variety of substrates with high shear and peel strength, including many plastics and oily metals.

Availbable size: 1.7fl oz cartridge. Work Time = 6-8 min Fixture Time = 10-15 min

3M DP-190 (2:1)

This epoxy-based adhesive has good performance in shear and peel. This flexible formulation has improved impact and shock resistance over traditional epoxy adhesives.

> Availbable size: 1.7fl oz cartridge Work Time = 90 min Handling Time = 8 hrs

3M General Purpose Adhesive Clean-

er

A specially blended solvent that provides easy cleanup of most types of adhesives, and quickly removes waxes, greases, oil, and tars. When properly used, it will not harm thoroughly dried paint, vinyl or fabrics. Available size: Quart (08984).



Plexus MA 300 General Purpose (1:1)

A methacrylate structural adhesive designed for general purpose bonding of a wide variety of materials in industrial applications. Forms tough, durable bonds to most plastics, composites, metals, ceramics, and woods in all combinations. Fast cure and fast fixture time makes this product very well suited for high speed manufacturing processes.

> Available size: 400mL cartridge. MA 300 Work Time = 6-8 min Fixture Time = 10-15 min.



Loctite-Hysol H3000 (1:1)

A low viscosity methacrylate structural adhesive designed for general purpose bonding of a wide variety of materials in industrial applications. Forms tough, durable bonds to most plastics, composites, metals, ceramics, and woods in all combinations. Fast cure and fast fixture time makes this product very well suited for high speed manufacturing processes. Cures to cream colour. Available sizes: 50mL and 400mL cartridge.



Work Time = 5 min Fixture Time = 12-15 min

Loctite-Hysol H3101 (1:1)

A low viscosity methacrylate structural adhesive designed for general purpose bonding of a wide variety of materials in industrial applications. Forms tough, durable bonds to most plastics, composites, metals, ceramics, and woods in all combinations. Medium cure and fixture time. Cures to cream colour. Available sizes: 50mL and 400mL cartridge.

> Work Time = 10-15 min Fixture Time = 25 min

Loctite-Hysol H8000 (10:1)

A toughened structural metacrylate adhesive with excellent bond strength to dissimilar substrates. Works well in composite to metal bonds. Fast fixture time. Cures to green colour. Available size: 490mL cartridge. Work Time = 10-15 min

Fixture Time = 15-20 min



IRUCTURAL DHESIVES

TR-150-25 Ultra High Temp Adhesive

A modified reactive polyimide solution providing outstanding high temperature service. Stable performance in 500°F environments with intermittent service to 850°! Excellent adhesion and higher flexural strength than most polyimides. Excellent bond to stainless steel, aluminum and titanium. Available sizes: 1lb kit. 9.3 lb kit.

ES 6228 Metal Adhesive

A thin epoxy paste designed for metal bonding. Capable of bonding to slightly oily surfaces such as freshly milled pieces where mill oil cannot be completely removed.

PT 5970 Graphite Filled Adhesive

A graphite filled epoxy repair paste and adhesive designed to match thermal expansion characteristics of carbon fiber laminated. Outstanding strength and toughness with service to 400°F!

OC-3700 Clear Adhesive

A two part, room temp curing epoxy optical cement. Recommended for glass-to-glass bonding, where its low mixed viscosity and room temp cure allow up to one hour of positioning. Low index of refraction and unusually low coefficient of thermal expansion make it especially suited to glass bonding.

PR 2040 Fast Adhesive

A fast curing, low viscosity repair epoxy with very high strength and toughness. Can be used as a very fast curing laminating resin for fast production of small, durable parts. Available as 45 lb pail kit only.

MGS Adhesive 135 (2:1)

Lightweight epoxy based highly thixotropic adhesive paste. Excellent bond to epoxy composites, and a variety of different substrates. Will not sag on vertical surfaces. Fills gaps up to 1/2". Cures green. Mix ratio is 100:50 by volume and 100:32 by weight.

Working time @ 20°C = 90 min @ 1mm.

Available sizes: 450mL cartridge,1.5 qrt kit (1.6 kg), 1.5 gal kit (6.4 kg)

T-88 Structural Epoxy Adhesive (1:1)

A medium viscosity two-component structural epoxy adhesive by System Three. Widely used in home built aircraft construction. This clear adhesive bonds to almost anything. It has good adhesive strength, tensile strength and impact resistance. Adhesive of choice for wood applications, including teak. Excellent for bonding dissimilar products.

Working time @ 25°C = 40-60 min Handling time @ $25^{\circ}C = 4-6$ hrs Available sizes: 50 ml cartridge, 1/2 pint kit, Pint kit, Quart kit, Gallon kit, 2 Gallon kit

Quick Cure Epoxy (1:1)

A System Three two-component adhesive that bonds to wood, fiberglass, and metal. Cures in 5 minutes. Ideal for quick repairs and holding parts in place while polyester/epoxy resin cures.

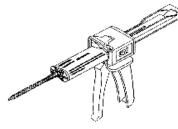
Working time @ 25°C = 3-5 min Available sizes: 50 ml cartridge, 1/2 pint kit, Quart kit.





Caulking Gun Adapter

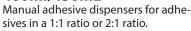
Economical dispenser for all 3M, Loctie and System Three small 35-50 ml cartridges in ratios of 1:1 and 10:1. Please specify mix ratio. Sleeve and plunger only! Does not include caulking gun. Not shown.



Adhesive Applicator Gun - 50ml

Industry standard manual adhesive dispenser for all 3M, Loctite, and System Three 35-50 ml cartridges. Illustrated above. Includes plunger. Available in ratios of 1:1 and 10:1 - please specify

Adhesive Applicator Gun -



ERGO Adhesive Applicator Gun- 400ml/450mL

Industry standard erogonamically designed manual dispenser for adhesives in 1:1, 2:1, or 4:1 ratio.

Mixer Tips

Industry standard static mixer tips for all our 1:1 adhesive cartridges.



Available in 50 mL small, 50mL large, 400mL/450mL, 5 pack and 25 pack

3M Adhesive Accessories

31373	EPX Plus Applicator
31376	EPX Plus 10:1 Plunger
31377	EPX Plus 2:1 Plunger
31378	EPX Plus 1:1 Plunger
21791	EPX Plus Mixing Nozzles
31381	EPX Plus 10:1 Mixing Nozzles

Empty Caulking Tubes

Standard sized fillable caulking tubes well suited for filling and application of catalyzed epoxy and polyester putties.



400ml/450mL



URETHANE RUBBER



POR-A-MOLD

Hyperlast's line of products consisting of urethane and RTV silicone flexible mold making products which are used in place of, or in conjunction with a fiberglass molding when the original plug is highly detailed or has undercuts. Por-A-Mold gives true detailed reproductions of originals in clay, wax, wood, resin, plaster, gypsum, and concrete.

Note: In the chart below, shore hardness increases as the flexibility decreases. All the rubbers can be made thixotropic by mixing in Cabosil (p.18). Data sheets with detailed information available for each product.

Physical Properties	2020	2030	2040	2060	2070	SI-12	SI-25
Shore Hardness	A24	A28	A44	A58	A70	A12	A25
Ultimate Tensile (psi)	375	634	752	1600	1468	400	550
Elongation (%)	1200	900	725	900	900	500	450
Tear (Die C, pli)	104	88	159	200	264	80	100
Tear (Split, pli)	23	12.8	23	33	59	NA	NA
Mixed Viscosity	500	750	700	275	1750	NA	NA
Mix Ratio by volume	1:1	1:1	1:1	1:1	1:1	10:1	10:1
Pot Life (min)	30	20	15	15-20	10	60	60
Cure Time @ 70°F	24 hrs	16 hrs					

Por-A-Mold 2020 (Soft)

Product is used to make molds of detailed masters that contain deep undercuts. It is ideal for projects that require the master to be visible during molding and cutting. Some common applications are to make molds for point-of-purchase displays, special effects, and sculpture reproductions. Clear in colour.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Por-A-Mold 2030 (Medium)

Our most popular rubber. A good combination of strength and stretch for most applications. Product is used to make molds of detailed masters that contain some undercuts. Some common applications are to make molds for point-of-purchase displays, special effects, and sculpture reproductions. Light amber in colour.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Por-A-Mold 2040 (Medium)

Product is used to make molds of detailed masters that contain some undercuts. Clear in colour. Some common applications are to make molds for point-of-purchase displays, special effects and sculpture reproductions. Clear in colour.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Por-A-Mold 2060 (Firm)

This product is used to make molds of detailed masters that do not contain undercuts. Good dimensional stability for mass casting. Used where a fiberglass mold might fail due to poor draft lines or a slight negative draft. Strongest rubber available. Other than flexible molding, some common uses of this material other are; diaphragms, dust boots, gaskets, liners, foundry patterns, wear pads, and concrete stamp pads. Light amber in colour.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Por-A-Mold 2070 (Hard)

This product is used to make molds of detailed masters that do not contain undercuts. Some of the most common uses of this material are diaphragms, dust boots, gaskets, liners, flexible molds, foundry patterns, wear pads, and concrete stamp pads. Deep amber in colour.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

URETHANE RESIN



Replicast 612

A two component filled urethane tooling system with easy handling and exceptional cured properties. 1:1, colour coded mix ratio by weight or volume for easy measuring and mixing. Long pot life and very low exotherm for material of this type for low cured shrinkage. Cured material machines easily. Very tough with good heat resistance. Castings can be demolded within 30 minutes and enter service shortly after. An excellent choice for quick patterns, fixtures and jigs. Also makes an economical, fast set potting material.

Available as 18 lb kit only.

Replicast Unfilled II

A tough, fast setting urethane casting system similar to Replicast 612 but without any filler content. Retains 1:1 mix ratio. Low viscosity gives potential for very high custom filler loadings to increase economy or tailor cast product for specific needs. Filler ratios of over 300% are possible. Provides an exceptionally tough, durable casting.

Available sizes: 17 lb kit, 85 lb pail kit.

PA0738 Filler

A high purity alumina based filler in a fine powder blended for addition to Replicast Unfilled. Fine grain structure allows high filler load while maintaining a good pourable viscosity in the mixed product.

Available as 50 lb pail only.

PT 8907/8909

A low viscosity modified polyurethane for machine dispensing. 45 second set time. Simulates ABS and HDPE. PT8907 is Black, PT8909 is Neutral and can accept many pigments. Tough, versatile material develops stregth quickly for fast demold. Not brittle even in thin sections. Heat resistance to 325°! A 10 minute hardener is available, and can be blended with the standard hardener for custom work times.

Available sizes: 14.4 lb kit, 72 lb kit.

PT 8925

A water white transparent urethane for tough, impact resistant clear parts such as lenses. Three hardeners available (90 seconds to 45 minutes) for customized work times and casting sizes. Very low toxicity. This material has higher heat resistance and greater durability than other products of this type, allowing parts to function in harsher environments.

Available sizes: 12 lb kit, 72 lb pail kit.

PT 8948/8949

A versatile prototyping urethane for machine mix or hand mix. Volumetric mix ratios can be uses with cartridge dispensers. Rapid demold material achieves full properties with room temp cure. Easily colours, very low viscosity picks up mold detail easily. Tough material mimics ABS and PP. Two hardeners available for each for customizable work times. PT8948 is neutral, PT 8949 is bright white.

Available sizes: 17 lb kit, 85 lb kit.



Por-A-Kast Mark I

A rigid 1:1 urethane casting resin. Used as end product in sculpture, pattern, prototype, taxidermy, and industrial applications. Three minute pot-life and quick cure make this system suitable for slush molding and high production turn-around rate. Less brittle than pure castings of polyester resin. Easily paintable. Color is off white.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Por-A-Kast Mark II

Same properties as PAK Mark I with the exception of a lower exotherm when curing which makes it better suited for thicker castings. Color is white.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

Por-A-Kast Mark III

Casting resin with even less exotherm than PAK Mark II. Four minute pot-life. Colour is white.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

PAK Clear Casting Resin

A clear UV resistant non yellowing 1:1 polyurethane casting resin. Very low shringage. Working time is 15 minutes.

Available sizes: 2 Quart kit, 2 Gallon kit, 10 Gallon kit.

PAK Flexible Casting Resin

A flexible 4:1 urethane casting resin that can be painted, nailed, cut, sanded, and flexed. Resists denting, cracking, deterioration, shrinkage, cold weather, splitting, and abrasion. Hardness is A90. Elongation is 130 %. Pot life is 5-6 min. Colour is light brown. Available sizes: 5 Quart kit, 5 Gallon kit, 15 Gallon kit.



Bronze Powders - Light/Dark

Light and dark bronze powders added to casting resins allow the end user an alternative to expensive metal casting. When mixed to a casting resin at approximately two to one by weight, the final product takes on the appearance and feel of a finely crafted brass or bronze casting. Surface of final product can be polished with steel wool to add a metallic luster. Available sizes; 5lbs (Quart), 20lbs (Gallon).

Associated Products

3M Microballoons can be added to reduce weight and cost and extend the volume. Cabosil to thicken and create thixotropic mixture and increase abrasion resistance (see p.18). Dry Snowhite can be added to reduce cost and add weight to give the feel of stone. A pliable Poly cloth imbedded in a urethane mold will reinforce the rubber and stop a tear once it begins (see p.30).

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Silicones Inc.



A versatile line of RTV silicone rubbers designed to withstand the rigors of casting polyesters, epoxies, polyurethane foams, and polyurethane resins. Also excellent for casting gypsum, concrete, and waxes. These rubbers have excellent chemical resistance, excellent heat resistance, excellent UV resistance, low shrinkage, and long service life.

GI-series These tin catalyzed silicones that are ideal for most general mold making. GI silicones are not sensitive to inhibition, meaning that they will cure over virtually any surface.

P-series These platinum catalyzed silicones offer superior heat resistance and cure with virtually no shrinkage. Although P silicones can be inhibited by tin, sulphur, or amines, they can be cured in total confinement and the cure rate can be dramatically accelerated with heat.

Physical	Working	Cure Time	Shore A	Tear Resist.	Tear Streng.	Elongation	Service	Shrinkage
Properties	Time (hrs)	(hrs)	Hardness	(ppi)	(ppi)	(%)	Temp (°F)	(%)
Gl-1110	1 to 2	16 to 18	10	75	275	450	-60 to 340	0.10
Gl-1000	1.5 to 2.5	16 to 18	32	120	525	300	-60 to 350	0.10
GI-1040	1.5 to 2.5	16 to 18	42	100	525	225	-60 to 350	0.20
P-45	.75 to 1.5	16 to 24	45	160	800	275	-60 to 600	nil

GI-1110

A tin catalyzed RTV silicone rubber with high elongation, low shrinkage, and low viscosity. Excellent molding rubber where high strength and very fine detail registration are required. Hardness is Shore A10. Light blue in colour.*

Available sizes: Quart Kit (2.5 lbs), 1 1/8 Gallon Kit (10lbs), 5 1/2 Gallon Kit (50 lbs) *GI-1110 is available in colourless state, which can be pigmented for special effects applications.

GI-1000

A tin catalyzed RTV silicone rubber with extremely high tear strength, high tensile strength, excellent chemical resistance and low shrinkage. Hardness is Shore A32. Light blue in colour. Available sizes: Quart Kit (2.5 lbs), 1 1/8 Gallon Kit (10lbs), 5 1/2 Gallon Kit (50 lbs)

GI-1040

A tin catalyzed RTV silicone rubber with extremely high tear strength, high tensile strength, excellent chemical resistance, low shrinkage, and moderate elongation. Maintains excellent dimensional stability in a freestanding mold. Hardness is Shore A40. Light blue in colour. Available sizes: Quart Kit (2.5 lbs), 1 1/8 Gallon Kit (10lbs), 5 1/2 Gallon Kit (50 lbs)

GI-245

A colourless pigmentable soft silicone designed for static prosthetics. Available sizes: Quart Kit (2.5 lbs), 1 1/8 Gallon Kit (10lbs), 5 1/2 Gallon Kit (50 lbs)

P-45

A platinum cure silicone rubber with excellent dimensional stability, virtually no shrinkage, excellent release, high heat resistance and superb physical properties. Available sizes: Quart Kit (2.5 lbs), 1 1/8 Gallon Kit (10lbs), 5 1/2 Gallon Kit (50 lbs)

GI-UFC Catalyst

GI- Ultra Fast Catalyst dramatically accelerates the speed at which GI series RTV silicone rubbers cure. GI-UFC can be used in place of or in combination with the standard GI series activator. GI-UFC can give a working time of 10min and a demold time of 30 minutes.

Available sizes: 1/4lb, 1lb, 5lb.

GI-Thinner

May be added to any of the GI- series silicones to lower viscosity and produce product that is softer and more flexible than original formulation. Do not add more than 15%. Available sizes: Quart, Gallon, 5 Gallon.

MOLDING MISC.

Synlube 531

Non-silicone release agent formulated for Por-A-Mold and Por-A-Kast products but also suitable with epoxies, polyester resins and silicone rubbers. Available sizes: Aerosol can (14 oz), Gallon, 5 Gallon, 55 Gallon



Synlube 1000

Serves same purpose as Synlube 531 but contains silicone. Available sizes: Aerosol can (14 oz), Gallon, 5 Gallon, 55 Gallon

Synlube 1711

Silicone based release agent with excellent release properties. Available sizes: Aerosol can (14 oz), Gallon, 5 Gallon, 55 Gallon

Green Parting Wax - Partall #2

A soft, easily applied silicone-free release wax made from a combination of hydrocarbon and microcrystalline waxes. Can be used on its own or as a primer coat for PVA. Works well over plaster. Avialable sizes: 8 oz, 24 oz, 5 Gallon



PVA

Poly vinyl alcohol is a release liquid that is brushed, wiped, or sprayed over non-silicone based waxes. Excellent for intricate surfaces and new molds. Cleans with warm water. Green in colour. Clear colour also available. Available sizes: 250 mL, Litre, Gallon, 5 Gallons.

Coverall Film - Purple PVA

A new and improved purple PVA. High solid content, better flow-out, easier to apply, and thicker film buildup per coat. Cleans with warm water. Available sizes: 250 mL, Litre, Gallon, Case (4 Gallons).

Pail Opener

One piece anodized aluminum tool used to open 5 gallon pails.

endura



Endura EX-2C Topcoat

A 1:1 two component aliphatic polyurethane topcoat from Endura. The best type of paint available for long-term outdoor service. Superior high gloss and colour retention. Outstanding resistance to UV, impact, abrasion, and chemical abuse. Available in virtually any solid or metallic colour. Flexible formulation available for fabric covered aircraft.

Component A is the colour component of the paint and is subject to tier pricing. Listed pricing is for 'Tier 1' colours. 'Tier 5' colours are the most expensive, which include most deep reds and pearl colours. Component A formulated as low gloss or flexible are priced 2 tiers higher. Component B is the same for all colours.

Available in Pint, Quart, Gallon and 5 Gallon

EX-2C Clear 100

A 1:1 two component clear coating designed to give extra protection over metallic or pearl colours. May be added up to 40% to EX-2C Topcoats in the second coat, to create additional depth of colour and increased gloss. Add 50% in cost to Component A for low gloss.

Available in Pint, Quart, Gallon and 5 Gallon

EP-2C Primer/Sealer

A 1:1 two component epoxy urethane primer containing zinc chromate designed for use on fiberglass reinforced plastics, bare metals, and as a sealer, or tie-coat over old existing finishes. Can be topcoated 30 minutes after application. Add 20% in cost to Component A for flexible primer/sealer.

Available in Quart, 2 Quart, 2 Gallon and 10 Gallon kit

EP-FD Epoxy Primer

A 1:1 two component grey or white epoxy polyamide epoxy primer. Excellent adhesion, hardness, flexibility, and corrosion resistance to many types of substrates. Ideal as a sealer over existing surfaces. Prolonged topcoat window of 2 hours to 7 days without sanding after application. NEW! Available in an assortment of colours. See back cover for colour card.

Available in Quart, 2 Quart, 2 Gallon and 10 Gallon kit

PE-2C 4:1 High Solids Primer

A 4:1 two component acrylic-urethane primer/surfacer that has high build capabilities and easy sanding characteristics. May be sanded 2 hours after application.

Available in 2.5 Quart, 5 Quart kit

Endura EX-2C Thinner

A special formulation used for thinning EX-2C Topcoats and Endura Primers. Add no more than 15 % by volume.

Available in 350ml, Quart, Gallon and 5 Gallon

Endura Slo-Thinner

A thinner recommended for thinning Endura products during hot or humid weather to increase flow-out properties of topcoats and primers.

Available in 350ml, Liter, Gallon

Endura Retarder

An additive used to improve flow-out and greatly reduce solvent popping during hot weather or high shop temperatures. Added at a rate of 200-800 mL per 4 L (Gallon) mixture.

Available in 50ml, 250ml, Liter, Gallon

Endura Crater Eliminator

An additive used to battle "fisheyeing". Add at a rate of 25-50 mL per 4 L (Gallon) mixture.

Available in 50ml, 250ml, Liter

Endura Super Catalyst

An additive used to increase the total cure time when time is an issue or when Endura is applied in cooler temperatures.

Available in 50ml, 250ml, Liter

Aluminum Cleaner & Alodine 1200S

A pretreatment and treatment respectively for aluminum and aluminum alloys. Apply before priming with EP-2C Primer/Sealer.

Al cleaner — Liter A 1200S — 1/4 lb

Endura Primelock

Surface pretreatment for vinyl and rubber substrates before application of EX-2C Topcoat SFC (Flexible). Available in Liter

Endura Texture Solution

Add to Endura EX-2C Topcoat to create textured surface designed for non-skid surface applications. Mix to EX-2C Topcoat at ratio of A:B:Texture Solution, 1:1:1.

Available in 500ml, Liter, Gallon

PAINT PRODUCTS

Epifanes Varnish

Top quality marine varnish from Holland. Assures high gloss and superior protection in all climates. Use on wood and cured epoxy as a UV filter and protective barrier. See data sheet for application over epoxy.



Available in 500 mL and Liter Thinner - 500 mL Ephifanes 2 " Brush

Epifanes Wood Finish Gloss

High gloss varnish-like finish. No sanding required if recoated within 72 hrs! Provides strong adhesion and quick filling for all marine woods incuding teak. For interior and exterior use.

Available in Liter

Epifanes Wood Finish Matte

A finish coat for wood finish gloss. Provides a beautiful, satin sheen. For interior or exterior use. Used on the inside of cedarstrip canoes.

Available in Liter

System Three Spar Urethane Varnish

A top quality high gloss single component urethane varnish. Excellent toughness and UV resistance. Designed as a UV coating for epoxy resins. Quick dry.

Available in Quart and Gallon

Morton Pre-Prep Cleaner

Dissolves wax, grease, oil, silicone, tar, and other contaminants. Provides surface ready to sand or refinish.

Available in Gallon

Non-Skid Additive

Mix with paint or gelcoat to create non-skid surface

CC Brand Quart System III Quart

Gerson 1500 Tack Rags and Paint Strainers

Designed for polyurethanes. Leaves no residue.

Gerson 1500 Gerson Strainer Available in units and 12 pack Available in box of 100



3M Scotch[™] 233+ Masking Tape

High performance masking tape designed to be highly conformable. Specially formulated water-based adhesive system which offers excellent adhesivbe transfer resistance. Lime green in colour. Roll length is 60 yds.



Available in packs of 12 and 48

Available in packs of 4 and 16

Part No. Roll Size M26334 3/4"

M26338 11/2"

3M Scotch[™] Fine Line Tape - No. 218

This specially extruded matte finish green polypropylene tape provides the finest colour line separation available because of its thinness. Stretches easily for smooth curves - yet tears easily by hand. Excellent solvent and moisture resistance. Allows taping over freshly cured lacquer, enamel and urethane paint systems sooner with less chance of imprint damage. Not for extended outdoor use.



Available in width of 1/4" and 1/2"

3M Paintable Plastic Sheeting

A unique thin masking film that allows paint adherence. Designed to reduce labour costs.

M06739	12ft x 400ft
M06740	16ft x 400ft

Paint Pal

Solvent resistant clear graduated plastic mixing cups. Ideal for mixing two-component paints. Reusable.

QuartAvailable in units of packs of 1002.5 QuartAvailable in units of packs of 1005 QuartAvailable in units of packs of 100



RECENT





ABRASIVES

3M Production Goldtm Paper Sheets 3M Production Gold Paper Sheets utilize a premium

3M Production Gold Paper Sheets utilize a premiu mineral, an improved paper backing, and total construction that results in a higher rate of cut, increased flexibility, increased abrasive life and a uniform finish.

Code	Grit	#/slv
M02539	400	50
M02541	320	50
M02543	240	50
M02544	220	50
M02545	180	50
M02547	120	50
M02549	80	50



3M Wetordrytm Paper Sheets

3M Wetordry(tm) Paper Sheets utilize a premium aluminum oxide mineral, an improved paper backing, and an optimized construction that results in the following performance advantages: improved rate of cut, increased abrasive life, increased flexibility, and a uniform, consistent finish.

9″ x 11″

9" x 11"

Code	Grit	#/slv
M02020	Micro Fine 2000	50
M02032	Micro Fine 1500	50
M02033	Micro Fine 1200	50
M02034	Micro Fine 1000	50
M02035	800	50
M02036	600	50
M02038	400	50
M02040	320	50
M02042	240	50

3M Wetordrytm Tri-M-itetm Paper Sheets

Use wet or dry for sanding old finishes, fine featheredging plus surface work. It is a silicon carbide, closed coat product bonded with a water-proof resin.

9″	x	1	1	"	

11″				234
	Code	Grit	#/slv	Sandpaper Center
	M02000	600	50	U Center
	M02002	400	50	
	M02014	180	50	
	M02016	120	50	
	102010	120	50	
		•		
		Pro.		
		Sorm	in.	
		VQ L	um .	44
		~)	Vthabra	
			"estasi	
			-11ee	,95
			ium abrasil V the sheet	{



These discs are aggressive, sharp, fast cutting and long lasting. Their construction also resists dulling, loading and edge wear. The pressure-sensitive adhesive coating ensures excellent adhesion to 3M Stikit disc pads without adhesive buildup.

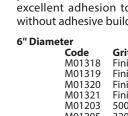
meter		
Code	Grit	#/slv
M01318	Finish 1200	100
M01319	Finish 1000	100
M01320	Finish 800	100
M01321	Finish 600	100
M01203	500	75
M01205	320	75
M01206	280	75
M01208	220	75
M01209	180	75
M01211	120	75
M01213	80	75

3M Green Corpstm Stikittm Production Discs

Pressure-sensitive adhesive backed discs, for easy application to and removal from disc pad. An all new mineral bond construction and tough "E" weight backing provide for a fast cutting, long lasting abrasive disc. Excellent for coarse sanding of hull and deck areas.

6" Diameter

	Code	Grit	#/slv
	M01506	80	100
	M01547	40	100
8" Diame	ter		
8" Diame	ter Code	Grit	#/slv
8" Diame		Grit 80	#/slv 50





ABRASIVES

3Mtm Hookittm Gold Film Discs

3M(tm) 255L Hookit(tm) Gold Film Discs incorporate a convenient hook-and-loop attachment system for easy attachment to and removal from the dual action pad face. Combined with the fast cutting, long lasting abrasive, the construction of the gold film product enables the user to obtain maximum usage of each disc.

lei			
M00907 M00908 M00909 M00910	Finish 1500 Finish 1200 Finish 1000 Finish 8005	0	50 50 50
M00911 M00912 M00913 M00914 M00915 M00916 M00917 M00919 M00921	Finsin 6005 500 400 320 240 220 180 120 80	U	50 50 50 50 50 50 50 50
ter			
Code M00950 M00968 M00969 M00970 M00971 M00201 M00203 M00206 M00207 M00209 M00211	Grit Finish 1500 Finish 1200 Finish 1000 Finish 800 Finish 600 400 320 220 180 120 80		#/box 100 100 100 100 100 100 100 100 100 10
ter Code M00994 M00996 M00990	180 120	Grit	#/box 25 25 25
	M00908 M00909 M00910 M00911 M00912 M00913 M00914 M00915 M00915 M00916 M00917 M00921 Ker Code M00950 M00950 M00950 M00950 M00950 M00950 M00950 M00970 M00201 M00201 M00201 M00201 M00201 M00201 M00201 M00201 M00201 M00201 M00201 M00209 M00201 M00209 M00201	Code Grit # M00907 Finish 1500 M00908 Finish 1200 M00909 Finish 1000 M00910 Finish 1000 M00911 Finish 1000 M00912 500 M00913 400 M00914 320 M00915 240 M00916 220 M00917 180 M00918 80 Ker Grit M00968 Finish 1500 M00969 Finish 1500 M00969 Finish 1500 M00969 Finish 1000 M00970 Finish 1000 M00970 Finish 800 M00971 80 M00972 Finish 1000 M00973 320 M00203 320 M00204 420 M00205 180 M00206 220 M00207 180 M00208 120	Code Grit #/box M00907 Finish 1500 M00908 Finish 1200 M00909 Finish 1000 M0091 Finish 1000 M00910 Finish 800 50 M00911 Finish 600 50 M00912 500 M00913 400 M00914 320 M00915 240 M00915 240 M00917 180 M00919 120 M00917 180 M00921 80 M09921 80 Rer Grit M09969 Finish 1500 M00968 Finish 1500 M00969 Finish 1000 M00970 Finish 800 M00991 Finish 1000 M00970 Finish 800 M00203 320 M00203 320 M02203 320 M00204 420 M02020 120 M00205 120 M0211 80

3M Green Corpstm Hookittm Regalitetm Discs

A uniquely blended mineral bonded to a tough "E" weight backing

provides a fast cutting, long lasting abrasive. The 3M(tm) Hookit(tm) attachment system allows easy application to and removal from the disc pad. Excellent for stripping paint or sanding marine fairing compounds.



6" Diam	eter		
	Code	Grit	#/box
	M00512	80	25
	M00515	40	25
8" Diam	eter		
	Code	Grit	#/box
	M00521	80	25
	M00524	40	25

M00521	80	
M00524	40	

Hand Pads

3N

Hookit" Gold Film Dis

Standard Block Pad 2 3/4" x 5" Ferro Velcro Soft Hand Pad 2 3/4" x 5" Ferro PSA Soft Hand Pad 2 3/4" x 5" Ferro Velcro Soft Hand Pad 6" Round Ferro PSA Soft Hand Pad 6" Round 3M Hookit Soft Hand Pad 2 3/4" x 5" (M05742 shown)



3M Hookittm Hand Pad

Conformable 6" pad with an elastic strap that holds the pad onto the hand for scuff sanding flat or contoured surfaces. Eliminates finger marks. The 3M Hookit pad face allows for easy attachment and removal with 6" Hookit discs.



3M Hookittm Half Round Pad

Conformable 6" pad with a straight edge for scuff sanding up to detail lines and molding. 6" Grip or Hookit discs are applied by lining up the curved side of the pad, folded over the straight edge and attached to the other side. The 3M Hookit pad face allows for easy attachment and removal with 6" Hookit discs. Code M5792

3M Hookittm Soft Interface Pad Soft and very flexible foam interface pads which attach to a 3" Roloc Pad or 6" velcro backup pad.

3

6″





Backup Pads 3" / 6" / 8"

M05771

M05774

High guality tough high density foam pads. Standard 5/16" shaft on 6" and standard 5/8" mount on 8" pads.

Diameter Style 3″

3″	3M Roloc	Hookit
6″	Standard	Velcro
6″	Standard	PSA
8″	Firm	Velcro
8″	Medium	Velcro
8″	Ultrasoft	Velcro
8″	Firm	PSA
8″	Medium	PSA
8″	Ultrasoft	PSA

3M Dry Guide Coat **Cartridge and Kit**

Dry Powder with applicator used to highlight surface imperfections and sand scratches prior to finishing with abrasives. Can be used on all fillers, primers, paints, and gelcoat. Contains no solvent. Kit comes with applicator pad.



M09560 50 grm cartridge

M09561 Kit (cartridge+applicator)

GRINDING / SHAPING

ALO Grinding Discs

Industrial quality aluminum oxide grinding disc for all fiberglass and metal. Clean bonding system promotes healthier working environment. Standard 7/8" hole.



4.5 " Diameter		
Grit	Disc/box	
16	25	
24	25	
36	25	
60	25	
80	25	

7 " Diameter

Disc/box
25
25
25
25
25

Socatt Discs

Aluminum oxide grinding discs attached to metal mount allowing flat detail abrasion with a drill or die grinder. Designed to work at high speeds. Backup pads come with standard 1/4" shaft.

2" Diameter

Sc

Grit	Discs/box
36	100
50	100
80	100
120	100

3" Diameter				
	Grit	Discs/box		
	36	50		
	50	50		
	00	FO		

ocatt Backup 2"		
120	50	
80	50	

Grinding Backing Pads

Pads for fiber discs. Fits all standard (5/8" shaft) slow speed grinders. Spiralface surface.

Diameter Polyamide

4.5 "



File Strip Abrasives

Made for attachment to file or fairing boards. 3M 40 and 80-grit is the premium Green Corps Hookit grade, 120-grit and higher is Gold Hookit.



2 3/4" x 17"

40-grit	Available in units or packs of 50
80-grit	Available in units or packs of 50
120-grit	Available in units or packs of 50

2 3/4" x 16"- 3M Hookit 3M0542 40-3M0539 80-

3

M0542	40-grit	Available in units or packs of 50
M0539	80-grit	Available in units or packs of 50
M2473	120-grit	Available in units or packs of 50
SM2473	180.grit	Available in units or packs of 50

3M2473 1 4 1/2" x 30" - Velcro

40-grit	Available in units or packs of 10
80-grit	Available in units or packs of 10
120-grit	Available in units or packs of 10

4 1/2" x 30" - 3M Hookit

3M02640	40-grit	Available in units or packs of 10
3M02638	80-grit	Available in units or packs of 10
3M02634	120-grit	Available in units or packs of 10
3M02632	180-grit	Available in units or packs of 10
3M02631	220-grit	Available in units or packs of 10
3M02630	320-grit	Available in units or packs of 10

Hand File Boards

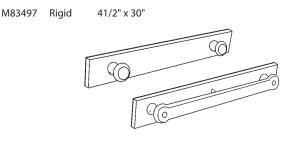
These well balanced, durable shop tools are resistant to most solvents. The rigid boards provide a non-twisting flat sanding surface. The 3M Hookit File Board (shown) has a velcro embossed face allowing easy attachment and removal of 3M Hookit Regalite File Sheets. Size is 23/4" x 161/2".



Hutchins Flexible 23/4" x 16" Hutchins Rigid 23/4" x 16" 3M05744 Rigid Hookit

3M Marine Hookit Fairing Board

The 3M Marine Hookit Fairing Board is designed for fairing, shaping, sanding, and finishing boats, plugs, and molds. This board features a durable, lightwieght construction that combines worker comfort and quick results. The rigid fairing board can be used for large flat areas such as the freeboard and deck. This board utilizes all 41/2" x 30" Velcro and 3M Hookit Regalite Sheets.



COMPOUNDS / POLISHES



Aqua-Buff 1000W

A water based aggressive compounding paste specifically designed for gelcoat surfaces. Well suited for reconditioning of heavily oxidized surfaces and removal of 400-grit scratches. Off-white color reduces the potential for staining light colored gelcoats. Cleans with water. Works well with 3M Pads.



Available in Quart and 2 Gallon pail

Aqua-Buff 2000

By far our best selling compound and polish. A water based finishing compound designed to quickly remove 600-grit scratches. It is coarse enough to remove light to medium oxidation in old gelcoat, yet fine enough to polish molds and plugs to a high gloss without swirl marks. Containes no silicone or wax. Cleanes with water. Best results are with a slow speed polisher. Does the job with one step and one product where other brands may require two or three products to achieve the same high gloss finish.

Available in Quart and 2 Gallon pail

Aqua-Buff 200

is our most popular compound. This environmentally friendly option is designed to remove small scratches from gel coats, FRP parts, cultured marbles, and acrylic and primer surfaces. It also polishes surfaces to bright mirror like finish. Water based compounds require only 1/2 of the normal compound usage. If compound becomes dry while parts are being buffed, re-wet agent by misting the surface with water . Recommended buffing speed: 2,500 RPM.

Available in gallon and pails

Gel-Gloss



A fine finishing liquid that cleans, polishes, and glazes gelcoated fiberglass, acrylic, and cultured marble. Removes 1200-grit scratches.

Available in single Pint and case of 12

Formula Five Clean N' Glaze

Compound that gently cleans and polishes oxidized surfaces while leaving behind a tough durable glaze

Available in single Quart and case of 12





3M Super Duty Rubbing Compound

Suggested for heavy, aggressive compounding of oxidized gelcoat and marine paint. Clings to paint and gelcoated surfaces - remains wet on the job with little or no mess. Maintains a high rate of cut with constant pressure. Buffs to high gloss with minimum of swirl marks. Can be used by hand or by machine. Contains no wax or silicone.

16oz
Quart
Gallor

3M Marine High Gloss Gelcoat Compound

This paste compound is designed to quickly remove P600 dual action

of 1000 wet sanding scratches from production gelcoat. The compound contains no wax or silicone and leaves a high gloss finish without swirl/wheel marks. It has a unique formulation which reduces slinging while buffing. Best results are obtained when used with a 3M Superbuff Pad or 3M Hookit Compounding Pad on a slow speed polisher.



M06025 Gallon 4/cs

3M Finesse-It[™] II Finishing Material

3M Finesse-it II Finishing Material is designed for use on topside paint

systems and gelcoats to remove swirl marks after compounding, while leaving a glazed finish. Also removes light to medium oxidation on gelcoat for boat reconditioning. Product contains no wax or silicone. It is also the suggested follow up step after using 3M Super Duty Rubbing Compound.

> M09048 16 oz M05928 Quart



3M Imperial Compound Finishing Mate-

rial

3M Imperial Compound Finishing Material can be applied by hand or DA. It produces a high-gloss, deep luster and a durable finish..

M06044 Quart

3M Marine Fiberglass Restorer

and Wax

Designed to remove heavy oxidation, chalking, fading, minor scratches, rust and exhaust stains; plus provide protection on fiberglass/gelcoat and marine topside paints. Unique formulation combines a rubbing compound with special blend of waxes which restore shine and protect in one application.



M09005 16oz (Liquid)

BUFFING PADS

3M Hookit SBS 8" System

Uniquely constructed 8" diameter compounding/polishing pad system provides quick change advantages while producing exceptional finishes on gelcoat and paint systems. This system is designed to provide easy attachment and removal and accurate centering of the 3M Hookit SBS Compounding or Polishing Pad to the 3M Hookit SBS Backup Pad. Fits all standard (5/8" shaft) slow-speed polishers.

105711	Compounding Pad	
105713	Polishing Pad	
105717		

M05717 Backup Pad

Ν

N

3M Superbuff[™] 2 Plus 2 Pad

This buffing pad is called the "2 Plus 2" because it features 2 sides to buff with plus 2 major advantages. More flexible-Gets into tight areas and reverse curves more easly. Longer life-Provides greater economics to your buffing operation. Heavy backup pads are eliminated by the "2 Plus 2" pads' own lightweight support system. Fits all standard (5/8" shaft) slowspeed polishers.

M05701

3M Superbuff[™] Compounding Pad

Aggressive, fast-cutting pad that is made of 100% untwisted wool. Stiffer center hub for more cutting power, double-sided pad that is excellent for hard paints. Fits all standard (5/8" Shaft) slow-speed polishers.

M05703

3M Superbuff[™] Adaptor

Adaptor for the 3M Superbuff Pads. For use with 3M Superbuff Pads, PNs M05700, M05701, M05705, and M05718. Works with 3M Perfect-It Backup Pad (PN M05718).

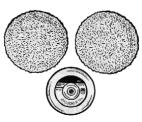
3M Perfect-It[™] Foam Polishing Pad

3M Perfect-It Foam Polishing Pad utilizes a 3M patented confoluted foam

face to produce a wheel mark free marine topside paint finish or gelcoat, when used in conjunction with 3M Perfect-It Machine Glaze or 3M Finesse-It Finishing Material. 3M Perfect-It Foam Polishing Pads attach to either 3M Hookit Backup Pads (PN M05717) or 3M Perfect-It Backup Pads (PN M05718). Fits all standard (5/8″ shaft) slow-speed polishers.



M05725 2 Pads per Bag



3M Marine Superbuff 6" Pad

A 6" diameter buffing pad with a 1" wool pile on both sides of the pad. Lightweight support is build into the pad, thus eliminating the need for heavy rubber backup pads. Designed to fit any standard electric drill with it 1/4" arbor and hex-head nut.



M09038

3M Finesse-It[™] Natural 3″ Buffing Pad

These 3" buffing pads are designed to get you into tight areas not accessible with a conventional polisher. Pads are hook-and-loop backed. 3" version attaches to the 3" 3M Finesse-It Roloc Finishing Pad (PN M14736).

M05078 3"

3M Finesse-It[™] Roloc[™] Finishing Pad

Holds the 3" 3M Finesse-It Natural Buffing Pad in place. Provides a soft surface for excellent results. Finishing pad mounts in a 3" 3M Roloc Disc Pad Assembly (PN M05540).

M14736 3″

TR 8" Buffing Pads

TR-701 (Thick) case of 36 TR-702 (Regular) case of 36



AIR-OUT ROLLERS

The recommended rollers for fiberglass laminating. Also known as a 'Fiberglass Rollers'. These rollers are the industry standard for effectively removing air bubbles while distributing an even layer of resin. All Air-out Rollers can be cleaned with acetone. Wide variety of styles and sizes not listed. SIZE - In general, a larger diameter means less roll-out time and quicker clean-up. As a roller diameter gets smaller, the fins get closer together and shallower. Thus, smaller diameter rollers relieve the small more numerous air bubbles faster.

Finned Roller

Industry standard fiberglass roller. Excellent air release properties in nearly all applications. A radii is machined on each fin. Aluminum head with plastic handle. Our most popular roller for general fiberglass work is the 1/2" x 3".

Dia.	Length
3/8 "	2 "
3/8 "	3 "
1/2 "	2 "
1/2 "	3 "
1/2 "	4 "
5/8 "	3 "
3/4 "	3"
3/4 "	6"
1 "	3"
1" 1"	5 6" 9"
2 "	9 "

Mini Finned Roller

High quality finned roller. High concentration of fins. Aluminum head and handle.

Dia.	Length
1/4 "	1" / 1.5" / 2" / 3"
1/4 "	2" Radius

Economy Standard Roller 1/2" $\phi \times 3$ "

Plastic head and wire handle. One size available.

Paddle Roller

European style roller with excellent air relief and easy cleanup. Fin orientation is transverse to the direction of rolling action. Preferred roller when working with knitted or uni-directional fibers. Aluminum head and plastic handle.

Dia.	Length
1/4 "	3 "
3/4 "	3 "
3/4 "	6 "



Corner Roller

Relieves air away from fillets and corners.



Radius Roller

An excellent roller for concave applications. Aluminum head and plastic handle.

Dia.	Length	Radius
1/4 " 1 "	2 " 1.5 "	5 " 2 "
1"	3 "	15 "
1.5 "	3 "	3.5 "
1.25 "	6 "	30 "

Bristle Roller

Short stiff black bristles oriented in a finned format. Those that use the Bristle Roller with Chopped Strand Mat will use nothing else. Works well on irregular surfaces. No fiber shearing. Also known as a 'pig hair roller'.

Dia.	Length
3/4 "	3"
3/4 "	6 "

3/4 " 3/4 "

Laminating Squeegee

Soft plastic squeegee used for wetting out of cloth.

Red unit or box of 24 West (Yel.)

Thalco Squeegee

Flexible rubber squeegee used for wetting out of cloth. Will not snag cloth. Reusable.

Available in 6 ", 12 " and 3 Feet

BRUSHES / ROLLERS

SHEARS

Resin Brush

The fiberglass shop brush. Red plastic handle natural bristle brush. Good bristle density. Will not easily lose bristles. Inexpensive enough to be disposable yet good enough quality to reuse.

Size	#/box
1"	50
2"	50
3"	25
4"	25



Econo Bristle Brush

Imported disposable wood handle natural bristle brush.

Size	#/box
1/2"Glue	144
1"	36
2"	36
3"	12

Foam Brush

Wood handle foam brush. One piece of foam, no glue lines. Ideal for tipping off epoxy, polyurethane, and varnish.

Size	#/box
1"	48
2"	48
3"	36
4"	24

Resin Rollers

Low pile nylon roller with phenolic core. Suitable for polyester, vinyl ester, epoxy marine coatings, and gelcoat. Unaffected by acetone clean-up. Reusable.

φ x length	#/box
1 x 3"	20
refills	10 prs
2 x 7" frame	24
2 x 7" cover	20

Foam Roller

Foam roller with phenolic core. Roller cover of choice for epoxies and polyurethanes.

φ x length	#/box
2 x 7 " frame	24
7 " foam cover	10 prs

Heritage Shears

Heavy duty top quality hot drop forged shears. Made in the USA.

718LRKMSB-9	9"
210LRKMSB-10	10 "
212LRKMS-12	12 "



Heritage Kevlar Kutter

Top quality hot-forged nickel. Thru hardened to a base Rockwell hardness of 59C. Surfaced with chrome for longer service life. Serrated bottom blade aids in cutting kevlar and prevents slipage. Also excellent for cutting product that would slip with conventional shears i.e. woven roving, light weight fiberglass, tightly woven aircraft cloth, peel ply, and spectra. Note: Assign a specific pair for kevlar only.



8 "	KK High Leverage
10 "	KK

Airtech Techshears

The most advanced manual cutting shears. The cantilever action reduces cutting effort by 50-70% over conventional shears. Blades are replaceable and titanium nitride coated for a sharp long lasting edge. Serrated blades are also available for kevlar.



Techshears Replacement Blades Serrated Blades

Pen Kevlar Shear

Heavy duty hot drop forged shears with tungsten-carbide coating on the cutting blades.

Available in 10" and 12"

EC Cutter

This unique lightweight cutter has multiple uses in a fiberglass shop. Excellent for cutting patterns, custom shapes for RTM, vacuum bagging, and hand lay-up. Will cut glass, keylar, carbon, and all vac



Will cut glass, kevlar, carbon, and all vacuum bagging products. Both rechargable battery and AC power adapter come with purchase.

Replacement Blades available

OLFA Rotary Cutter

High quality 2" rotary cutter.

Olfa Cutter and 2" Blade available

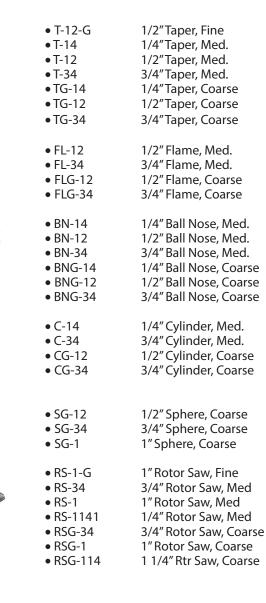


CARBIDE CUTTING TOOLS



Kutzall carbide cutting tools are fast cutting, long wearing tools featuring structured tungsten carbide teeth. These extremely sharp conical teeth provide fast, non-loading stock removal. They are suitable for fiberglass, wood, and most composite materials. Kutzall rotary bits come in coarse, medium and fine grades and have either a 1/8" or 1/4" mandrel. Kutzall also produces sanding drum sleeves, discs, files, auger bits and hole saws. If you do not see the type of cutter that interests you, contact FFO for a complete list of available Kutzall products.

Kutzall Rotary Tools - 1/4" Arbor

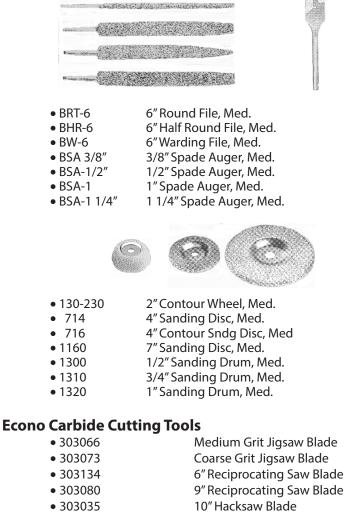


Kutzall Miscellaneous - 1/8" Arbor

• RS-12-EG	1/2" Rotor Saw, Fine
• RS-34-E	3/4" Rotor Saw, Med.
• S-14-E	1/4" Sphere, Med.
• BN-18-E	1/8" Ball Nose, Med.
• FL-18-E	1/8" Flame, Med.
• FL-14-E	1/4" Flame, Med.
• T-116-EG	1/16" Taper, Fine
• T-18-E	1/8" Taper, Med.

• T-14-EG 1/4" Taper, Fine

Kutzall Files, Augers and Hole Saws Kutzall Sanding Drums and Discs



- 10" Hacksaw Blade
- 10" Rodsaw Blade
- Carbide File
- 4 Cutter Carbide Holesaw
- Set with 1 3/8", 2 1/8", 2 1/2", 2 7/8"



• 303011

304094

305237



DIAMOND CUTTING TOOLS



Top guality diamond coated cutting tools manufactured by Diatrim for the composite industry. Diatrim diamond cutting tools offer the ultimate in hardness and durability. Properly cared for they can offer a lifetime of service. Please inquire regarding availability of Diatrim products not listed.

Diatrim Router Bits

All router bits come with a standard 1/4" shank.





Super-Speed

(D54-series)

The ultimate in

diamond saw cutting.

D85-316 D85-14 D85-125 D85-516 D53-2

³/16"φ x ¹/2 ¹/4″φ x 1″ ³/32["]-³/16"φ x 1"Tapered ⁵/16″φ x 1″ 2"φ Spindle Saw

Diatrim Saw Blades Side-Spoked

Continous Rim (D50-series)



Most widely used for general purpose cutting.

D50-2116

D50-MLTI

D50-3116

D50-4116

D51-4116

D54-4332

Excellent for thicker or slightly curved cutting.

(D51-series)

2"φ x 1/16"Thick 3"φ (For Fein Multimaster) 3"φ x ¹/16"Thick 4"φ x 1/16"Thick 4"φ x 1/16" Thick 4"φ x 3/32" Thick

Diatrim Hole Saws

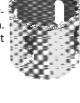
Corrugated edge which provides extra cutting clearance for speed of drilling and also good core ejection. Holesaws are used with standard 1/4" pilot drill (not included).

D60-034	³/4″φ
D60-1	1″φ΄
D60-114	1¹/4″φ
D60-112	1¹/2″φ

Econo Diamond Cutting Wheels

Adapts to most grinders, 7/8"-5/8" opening. Picture shown is of a segmented rim saw blade.

> D4CONT 4" Cont. Rim Wet Saw D4TURB 4"Turbo Rim Wet/dry



CUTTING TOOL

Diatrim Air Trimmers

Top guality powerful and dependable air saws that are designed for fast production trimming of FRP parts. D10-3 and D10-4 come with dust extractor guards. The popular D10-4 can cut parts up to 1" in thickness.



Code	Dia.	Cutting Depth	Air Consump.
D10-2	2"	⁷ /16"	15 CFM
D10-3	3"	¹ /2"	19 CFM
D10-4	4"	1"	23 CFM

Diatrim Air Router D30-SE50

A high speed router designed to use diamond router bits up to 1/4" diameter and cut laminates up to 1/4" in thickness. Vibration free cutting action leaves a chip free edge on any composite. Each unit is fitted with a dust extraction cowl for jig following. Also included is 1/4" diamond router bit.



Diatrim Air Router

D30-SE50

A high speed router designed to use diamond router bits up to 1/4" diameter and cut laminates up to 1/4" in thickness. Vibration free cutting action leaves a chip free edge on any composite. Each unit is fitted with a dust extraction cowl for jig following. Also included is 1/4" diamond router bit.

Deprag Die Grinders

High quality industrial grade die grinder with high torque and 30,000 RPM capability. Quiet operation with variable speed turn start and coaxial exhaust. PBU120 has angled head at 120° and very high torque due to unique drive construction.

PB-20C-35YK	Standard
PBU120-35YK	Angled





TOOLS

G100 Gelcoat Cup Gun

Solid cast aluminum body with easy to clean brass nozzle. Built in air volume control. Gelcoat is contained in throwaway paper cups which minimizes cleaning. Gun includes FN-6 nozzle (for gelcoat). Additional nozzles are available for spraying resin, parting films, gelcoat with metal flake, and liquid gypsum.



G100 Cup Gun

G100 Liter Disp. Paper Cups in pack of 25		
Nozzle	Size	Spray Product
FN-1	1/32 "	Parting Film
FN-2	1/16"	Parting Film
FN-3	3/32"	Paint
FN-4	1/8"	Resin
FN-5	5/32"	Gelcoat
FN-6	3/16"	Gelcoat
FN-7	7/32"	Gelcoat w/ Flake
FN-8	1/4 "	Gelcoat w/ Flake
FN-9	9/32"	Sand Blasting

G150 Gravity Feed Attachment

Attachment for the G100 Cup Gun consisting of a two gallon pail and hose for spraying more than the 32 ounce cup capacity.

C93-A Air Powered Chopper

Compact hand held choppers are perfect for both small and large jobs. Converts low-cost continuous strand roving into chopped glass for laminating. Variable speed for controlling glass fiber output. Output is 3.5 lbs/min. with 1 " long strands. Chops from 1/4" to 3" long strands.



C93-EF Electric Powered Chopper

Same as C93-A with the exception of power source and chopping length. Chops from 1 " to 3 " long strands.



Preval Sprayer

Power unit and empty bottle that will spray up to 16 oz of any liquid (gelcoat, paint, pva, etc). Perfect for small repair jobs.

Mil Gauge

Aluminum gauge with graduations stamped so that they will not wash off by acetone.

Epoxy/Paint Gauge Gelcoat Gauge 3-18mL 10-35mL

Laminate Thickness Gauge

Aluminum body with brass locking pin and stainless steel measuring pin. Over 1 " of travel.



Top quality plural component spray gun for spraying gelcoat or resin and catalyst. Kit includes gun, 25 ft fluid hose, 25 ft air hose and 2 gal pressure pot.

> 2001GW 2001GW Kit

Binks Gelcoat Spray Guns

For air atomized gelcoat systems, for use with Binks Catalyst injector or for "Hot Potting". Gelcoat delivered from a pressure pot.



Code rated pressure tanks available from two quart to 60 gallon, in galvanized or stainless steel, single or dual regulated.

Binks Catalyst Injector

Feeds the desired ratio of MEKP catalyst into the airstream feeding the spray gun. Excellent catalyst/material integration.



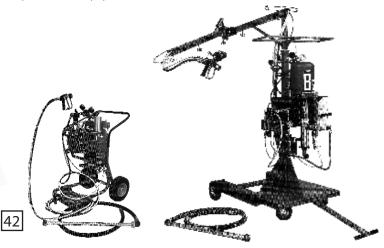
Booth Coat / Air Filters / Booth Filters

Peelable coating for Spray Booth Walls. Water based, sprayable, fast drying. Available in 5 gal cans. Centrifugal, Coalescent and Dessicant Filters available, as well as fluid heaters and pressure regulators. Booth filters are available in 3 packs, 3ft x 30ft x 2.5in.



Binks LEL (Low Emission Laminating)

Gelcoaters and Chopper systems are MACT-compliant, non-atomizing spray systems for reliable, trouble free gelocat and resin delivery. "Soft Spray" for very high material transfer efficiency. Extremely rugged high production equipment, available cart or wall mounted.





BINKS

DISPENSERS / CONTAINERS

ES Catalyst Dispenser

Industry standard for measuring and storing MEKP catalyst. The top cup measures up to 35 mL by increments of 5 mL for easy and accurate measurements. Lower bottle pint and quart capacity available. Pint bottle is our standard.



Available in Pint and Quart.

Graduated Cups

Chemical resistant graduated clear plastic cups. Sold individually or by the bag/box.

Available in 1oz, 4oz, 8oz, 32 oz (Quart), 2.5 Quart, and 5 Quart.



Syringes

Chemically resistant graduated clear plastic syringes. Luer-lock tips are interchangeable. Additional tips available upon request. The 400 mL product is actually an opaque white empty caulking tube.

Available in:	
5 mL	box of 100 Luer-Lock Tip
20 mL	box of 20 Luer-Lock Tip
60 mL	box of 20 Tapered Catheter Tip
MJ 12 mL box of 50	
400 mL	box of 24 Tapered Tip
16G x 1 ¹ /2"	Aluminum Luer-Lock Tip
(convenient resueabl	le tip for dispensing chemicals)

Paper Mixing Containers

Available III.		
Coffee Cups 6 oz	\ 170 mL	2000 /box
Tub 1lb \ 500 mL	Red/White 500/box	
Tub 2lb* \ 1 L	Red/White	500/box
Tub 3lb \ 1.5 L	Blue	300/box
Tub 5lb \ 2.3 L	Blue	100/box
Tub 10lb \ 4.5 L	Blue	100/box

*Not Shown



Containers

Plastic: Available in 4 Liter Jug, 4 Liter Bucket, 500mL, 50 mL Metal: Available in 1 Gallon, 5 Gallon, 1 Liter, 500mL

Swispump Catalyst Dispenser

Wall mounted dispenser for accurate measuring of larger quantities of MEKP catalyst. Stainless steel and glass construction for the pump area, anodized aluminum wall mount construction. Measures up to 100 mL by increments of 1 mL.





SAFET

PR-88

A German made non-silicone glycerin based barrier cream. Protects against skin damage when working with resins and fiberglass. Will not transfer. Washes off with water. Biodegradable. Available in 100mL and Litre

Econo Latex Gloves

4 mil latex rubber. S, M, L, and XL available. Available in box of 50 pairs or in case (10 boxes)

Latex Chemical Gloves

Best 5 mil latex rubber. S, M, and L available. Powder-free available. Available in box of 50 pairs or in case (10 boxes)

Nitrile Gloves

Strong chemical resistance and tougher than latex or vinyl. Non-latex. M, L, and XL available. Blue in colour. Available in box of 50 pairs or in case (10 boxes)

Rubber Gloves

Full length chemical resistant reusable gloves. M, L, and XL available. White in colour. Available in unit or 12-pack

Tyvek Sleeves

Tyvek disposable sleeves with elastic cuff. Length is 18 ". Available in unit or 12-pack

Tyvek Coveralls

Hooded Tyvek coveralls with elastic cuffs. Available in coverall (M / L / XL) or coverall (XXL), unit or box of 25

Power Maxx Hand Cleaner

The ultimate fiberglass shop hand cleaner. Of course, one should wear gloves while working with fiberglass, but inevitably some sticky stuff will make its way onto your skin. Power Maxx quickly removes all our resins, all our pigments, all our chemicals, and all our paints. Non-caustic, non-toxic. It works — try it! Available in 500mL , Gallon and 5 Gallon

3M 2097 P100 Particulate Filter

This filter has been certified as being 99.97% efficient at removing solid and liquid particles including those containing oil. Designed for use with the 3M 6000 Series Respirator and 3M Full Face Respirator for sanding operations or for low levels of organic vapours. Lightweight system and allows for superior efficiency over conventional particulate respirators. Code #M2097 per pair.



Meets NIOSH 42 CFR 84 N95 requirements. Suitable for sanding dust of cured fiberglass, putties, and paints. Lightweight construction with adjustable nose clip. Available in unit or box of 20 masks

3M 6000 Series Respirator

The 3M 6000 Series Respirator is a NIOSH/MSHA approved half-mask respirator that is adaptable to a wide range of respiratory protection. Its low maintenance, comfortable design allows greater worker flexibility by the use of five different type cartridges and two types of prefilters for a variety of work environments. Cartridges are simply twisted on or off of the facepiece for easy replacement which allows the facepiece to be used over and over. The facepiece is easy to clean and is supplied with a storage bag.



6001

5P11



3M Full Face Respirator

Affords eye and respiratory protection. Reusable design - changeable filters, cartridges, and lens cover. Use same cartridges, prefilters, and retainers as with 3M 6000 Series Respirator. Mask is supplied with one lens cover.

6800 Medium Mask 6900 Large Mask 6001 Organic Vapour Crt 5P11 Particulate Filter Prefilter Retainer 501 6885 Lens Cover 6800-LK Laminator's Kit (Mask + Cartridge) 6800-PK Painter's Kit

(Mask, Cartridge, Prefilter, Retainer, + Lens Covers(5)

3M 2097 P100 Particulate Filter

This filter has been certified as being 99.97% efficient at removing solid and liquid particles including those containing oil. Designed for use with the 3M 6000 Series Respirator and 3M Full Face Respirator for sanding operations or for low levels of organic vapours. Lightweight system and allows for superior efficiency over conventional particulate respirators.



Lens

Cover













SCALES

MISCELLANEOUS

Scale KD7000

7kg capacity scale with 1gram accuracy. Easy to clean stainless steel top. Ideal for measuring epoxy/hardener mixes.



Scale 3001

3kg capacity scale with 1gram accuracy. Slim design. Slips neatly into a ziplock to keep clean. Ideal for measuring smaller quantities of epoxy/hardener mixes.



Scale iBalance i5500

5kg capacity scale with 0.1gram accuracy. Very economical for such a highly accurate scale. Easy to clean stainless steal top.



Wedges

Polyethylene wedges for general purpose demolding. Will not scratch

gelcoat. Available in standard white, flexible pink, and toughened nylon green. Sizes available: 4 "x 1.25 ", 6 "x 2.25 ", 10 " x 3.5 ", 10 " Thinline

Air-Injected Wedge

High density 6" x 3" air injection wedge for fast part release.



Steel 2" Gate Valve

Heavy duty steel construction fits standard 2 " drum opening. Standard valve for resin and gelcoat drums.

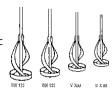
Putty Knives

Flexible professional quality with black nylon handle and stainless steel blade. Available in 1.5" and 4" size.



Paint Mixers

Steel mixers designed to fit any standard electric drill with 1/4" arbor. Sizes from 12" to 24".



Tongue Depressors

Wooden mixing sticks available in box of 100 and box of 500.

Permoplast Modelling Clay

Oil based non-hardening modelling clay. Will not breakdown when exposed to polyester or epoxy resin. Usefull for plug work. Great as a quick fix for chips in molds. Available sizes: 4 sticks (11b), 51b box, and case of 10 boxes.

MARINE



3M Marine Adhesive/Sealant 5200

High performance polyurethane adhesive/sealant becomes tack free in 24-48 hrs, and completely cures in 5-7 days with no shrinkage. The seal is extremely strong, retaining its strength above or below the waterline. Stays flexible too-allows for structural movement. Has excellent resistance to weathering and salt water. Bonding and Sealing jobs: fiberglass deck to fiberglass hull, wood to fiberglass, portholes and deck fittings, motors on the fiberglass transoms, under mouldings, hull seams above or below waterline, center board trunk joints, between struts and planking, stern joints, deck housing etc. Will not slump on vertical surfaces. Remains workable up to four hours after application. Available in white (M06500) and black (M06504).

Available in 10 oz and case of 12

3M Marine Adhesive/Sealant

Fast Cure 5200

Fast cure version of 5200 which becomes tack free in one hour and completely cures within 24 hours. Delivering strong flexible seals, this product is ideal for applications where a fast, long-term seal is needed above or below the waterline. Available in white (M06520).

Available in 10 oz and case of 12

3M Marine Adhesive/Sealant

Fast Cure 4200

A one-part general all-purpose polyurethane that chemically reacts with moisture to deliver flexible bonds with good adhesion to wood, fiberglass, gelcoat, plastics, and metals. Paintable and sandable. Forms watertight, weather-resistant seals on joints and boat hardware above or below the waterline but allows for easier disassembly than 3M Marine Adhesive/ Sealant 5200.

Available in 10 oz and 400ml, unit or case of 12



Sikaflex 291 Marine Adhesive and Sealant

Fast curing polyurethane sealant/adhesive. Highest flexibility of the Sikaflex series, suitable for bonding hull to deck and exterior structural members. Tack free in 1/2 to 1 hour and final cure achieved in 3 days. Available size: 10oz cartridge.

Sikaflex 291LOT Marine Adhesive and Sealant

LOT (Long Open Time) flexible one part multipusealant/adhesive. Three hour open time. Good adhesion properties for structural members in conjunction with mechanical fasteners. Sandable in 3-4 days, final cure 4-8 days. Available size: 310 mL cartridges.



3M General Purpose Adhesive Clean-

er

A specially blended solvent that provides easy cleanup of most types of adhesives, and quickly removes waxes, greases, oil and tars. When properly used, it will not harm thoroughly dried paint, vinyl or fabrics.



M08984 Quart Can

3M Marine Clean and Shine Wax

3M(tm) Marine Clean and Shine Wax is a quick and easy, "spray on/wipe off" product that recaptures that "just waxed" look and feel. Excellent for use on wet or dry surfaces; no water needed! May also be used to enhance the shine of your boats fiberglass gelcoat, marine topside paint, painted aluminum or metal parts. Simply spray on sections that are still wet after washing and rinsing, and revitalize the finish by wiping the surface dry.



M09033 15oz

3M Marine Protective Liquid Wax

Designed to provide high gloss and protect fiberglass/ gelcoat, marine topside paints, painted aluminum, and marine metal parts. A special formulation which uses reactive chemistry and actually bonds to the boats surface to provide a durable protective surface. Easy on/exceptionally easy off formula which also retards ultraviolet (UV) light damage.



M09026 16 oz

3M Marine Ultra Performance Paste Wax

Contains the unique 3M polymer technology which provides the durability of an acrylic, with the soil release and water beading properties of a fluoropolymer and silicone. This innovative new product will leave a protective high gloss finish on marine fiberglass gelcoat, marine topside paints, painted aluminum and metal parts, The easy on/easyoff formulation will save time and effort and leave your boat with a long lasting protection that retards UV light damage.

MO90309.5 oz (tub)

3M Perfect-It[™] Detailing Cloth

Unique, super-soft micro-texture cloth that is great for paint, chrome, glass, dashboards and more. Non-linting and clear coat safe.



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Detailed descriptions of listed products and more can be found in the West System User Manual — Free * For West System Epoxy see p. 4.

General Repair

~ .		a
Code	Description	Quantity
101	Handy Repair Pack	
101-6	Maxi Repair Pack	
300	Mini Pumps Set	Quart/ Gal/ Pail Kit
701-20	Graphite Fibers	20' x 1"
701	Graphite Fiber	100' x 1"
	G/5 5-min Epoxy	8 oz kit
	G/5 5-min Epoxy	32 oz kit

Fillers

Code	Description	Quantity
403-09	Microfibres	6.0 oz
403-20	Microfibres	20 oz
404-15	High-Density Filler	15 oz
404-45	High-Density Filler	45 oz
405	Filleting Blend	8.0 oz
406-2	Colloidal Silica	1.9 oz
406-7	Colloidal Silica	6.0 oz
407-5	Low-Density	4.7 oz
407-15	Low-Density	12 oz
410-2	Microlight	2.0 oz
410-7	Microlight	5.0 oz



Additives

Code	Description	Quantity
422-16	Barrier Coat Additive	16 oz
422-48	Barrier Coat Additive	48 oz
420X	Aluminum Powder	1 lb
421	Fire Retardant	1 lb
423-6	Graphite Powder	6 oz
423-12	Graphite Powder	12 oz
425	Copper Compound	6 lb
501-6	White Pigment	6 oz
501	White Pigment	1 lb
501	White Pigment	1 lb
503	Gray Pigment	1 lb
505	Gray Pigment	di i



West Vacuum Bagging Supplies

Code	Description
879-2	Release Fabric
881-2	Breather Fabric
882-2	Vacuum Bag Film
883	Vacuum Bag Sealant
885-1	Venturi Vacuum Generator
885-2	Muffler
885-3	Vacuum Cups
885-4	Vacuum Tubing
885-4	Vacuum Gauge 0-30 Hg
885	Vacuum Bag Kit

Application Tools

Code	Description	Quantity
800-2	Roller Covers	2-pack
801	Roller Frame	
802	Roller Pan	
803-12	Glue Brushes 1/2"	dozen
804-12	Mixing Sticks	dozen
807-2	Syringe	2-pack
808-2	Squeegee	2-pack
810-2	Caulking Tube	
860-8	Aluminum Etch Kit	2 x 4oz
860	Aluminum Etch Kit	2 x pint

West Literature

Gougeon Brothers on Boat Construction Fiberglass Boat Repair Gelcoat Blister Repair Fairing & Finishing Wooden Boat Repair Vacuum Bagging Technique







Cetol Marine

The original durable translucent protective wood finish for interior and exterior use on boats. Provides flexible breathable finish, superior UV and weathering protection for teak and other woods. Not for use below waterline. Available size: Quart.



Cetol Marine Gloss

An additional overcoat to *Cetol Marine* a for a high gloss finish. Cetol Marine must be used as a priming coat. Available size: Quart.



Awlgrip Awl-Fair

A two-component premium trowelable epoxy filler for fairing, leveling, or smoothing surface imperfections due to gouges, pitting, dents, or weld seams. May be used above or below waterline. Mix 1:1. Available size: 2 Gallon Kit.



Interlux Watertite

Quick curing super-smooth epoxy filler suitable for use on fiberglass, metals, and rigid wood construction. Low shrinkage and water resistant making it suitable for osmosis damage repair. Mix 1:1.



Meguiars Boat Wash

Long lasting suds. Safely removes grime and dirt. Refreshing scent and Biodegradeable. Available size: 64 oz.

Epifanes Varnish

Top quality marine varnish from Holland. Assures high gloss and superior protection in all climates. Use on wood and cured epoxy as a UV filter and protective barrier. See data sheet for application over epoxy. Available sizes: 500mL and Liter.



Epifanes Wood Finish Gloss

High gloss varnish-like finish. No sanding required if recoated within 72 hrs! Provides strong adhesion and quick filling for all marine woods incuding teak. For interior and exterior use. Available by the Liter.





Listed below is a sampling of the *Interlux* products that we stock.

Interprotect 2000

Two-part epoxy coating with Microplates developed to protect fiberglass hulls from water absorption and repair of osmotic blistering. Can be used above and below waterline as universal primer. Grey in colour. Available in white by request.



Interprotect 3000

Interprotect 3000 is a high solids two-part epoxy coating ideal for application in low temperatures. Developed to protect old and new fiberglass hulls from water absorption, leading to hull blistering. Offers many of the same properties as *Interprotect 2000*.

Interlux VC Performance Epoxy

An extremely hard epoxy designed for use on boat bottoms and keels of racing sailboats or performance powerboats that do not require antifouling paint. Can be applied to fiberglass, epoxy, and metal. White in colour.



Interlux Bottomkote XXX

Providing good value to boaters, this antifouling can

be applied over all properly prepared existing coatings and substrates (except aluminum). The soft paint film of Bottomkote XXX allows for easy cleaning and minimal paint build-up.

Interlux Fiberglass Bottomkote

This antifouling can overcoat any existing bottom coat and offers solid protection against all types of fouling, including Zebra Mussels. For fiberglass, wood or steel boats.

Interlux Trilux II

A hard anifouling paint specifically developed for use on aluminum boats, outdrives, and outboards. It can also be applied to fiberglass, wood and other underwater metal on boats. Trilux also contains teflon for easy cleaning.

Interlux Micron CSC

A very effective copper based antifouling. The copper-copolymer formula of Micron CSC provides a controlled release of antifouling biocide at the paint surface. The longevity of the coating is related to the amount of paint applied. Micron CSC will not lose its effectiveness when hauled out of the ater for long periods of time.

Interlux Interstrip 299E

This paint stripper will remove all types of paints; antifoulings, enamels, varnish, and polyurethanes from fiberglass, wood, metal, glass, and most plastics. Will not harm polyester resin/gelcoat. Does not contain methylene chloride, caustics or acids.

