

# SYSTEMTHREE®

PREMIUM ADHESIVES & COATINGS



## *Products with Purpose*

**PRODUCTS • TECHNICAL DATA • ACCESSORIES**

# ABOUT US



System Three Founders Tom Freeman and Kern Hendricks aboard the "Orion".  
The first boat built with System Three General Purpose Resin circa 1981.

## A HISTORY OF INNOVATION

System Three has been in the business of manufacturing formulated chemical products for nearly thirty years. Our product development team is one of the most talented and creative in the industry. We produce a complex range of products for some of the world's most demanding industries. Our expertise is recognized throughout the markets we serve as is our ability to meet the specific needs of our customers.

## BOAT BUILDING LAUNCHED OUR COMPANY

Thirty years ago the boatbuilding industry was changing. Traditional practices were giving way to modern methods and materials, yet few companies had the ability to meet the challenges that these new boats required. The founders of System Three saw the need for a new, innovative, groundbreaking line of products and began producing the System Three brand of Premium Adhesives and Coatings. In the following years, System Three has continued to be a marine industry leader as well as addressing the needs of the woodworking, sporting goods, automotive, aerospace and consumer products industries.



## THE LEADER IN APPLICATION SPECIFIC, FORMULATED CHEMICAL PRODUCTS

We have spent a great deal of energy and resources producing state-of-the-art, formulated chemical products for the marine industry. This includes laminating resins, structural adhesives, quick setting adhesives, fairing putties, filleting putties, and coatings. Our goal has always been to manufacture products that are exceptionally easy to use and perform to the highest standards. It is not uncommon for some brands, selling into the marine market, to offer a limited group of products, often from a single resin base. They require the user to modify them for their individual needs; our approach has been to produce a wide range of products, each conceived and manufactured for a specific job. This application specific approach allows us to fine tune the formulation, utilizing just the right components, in the appropriate amounts, and control the entire manufacturing process. This yields products that are far better suited for their intended purpose; easier to use, requiring no additional modification, consistent from batch to batch and greatly reducing mess and costly waste.



## NO COMPROMISES

An application specific approach assures that no compromises are made in the formulation that would otherwise be required if a single resin system were the basis for this wide range of applications. Just as you wouldn't expect a paint to make a great adhesive simply because the two share the same base ingredient, you shouldn't expect a coating to make a great adhesive or putty. It is the application alone that should dictate the formula not the desire to use a particular component.

## TABLE OF CONTENTS

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### SILVERTIP SERIES

SilverTip Laminating Resin .....	1
SilverTip QuikFair, SilverTip GelMagic .....	2
SilverTip EZ-Fillet, SilverTip MetlWeld .....	3

### GENERAL PURPOSE RESINS

System Three General Purpose Resin.....	4
---	---

### SPECIAL PURPOSE RESINS

Clear Coat, SB-112 .....	5
MirrorCoat, Turbo Cure.....	6
Phase Two .....	7

### ADHESIVES

Quick Cure 5 & 15, T-88 .....	8
-------------------------------	---

### WOOD RESTORATION

RotFix, SculpWood, QuikStix .....	9
Board Defense, Impel Rods .....	10
EndRot Kit .....	11

### PAINT & VARNISH

Spar Urethane Varnish, WR-155 Primer .....	12
WR-LPU Topcoat.....	13

### ACCESSORIES

Mix & Measure .....	14
Applicators.....	15
Safety Supplies.....	16
Fillers .....	17
Fiberglass.....	18
FAQ's.....	19

# SilverTip SERIES

## SilverTip Laminating Resin



Sizes available:

Pint (Hardener only)  
Quart  
½ Gallon (Hardener only)  
Gallon  
2½ Gallon  
5 Gallon  
Drums

### Product Description:

SilverTip Laminating Resin is a medium-low viscosity, liquid epoxy resin system that has been optimized for coating and reinforcing fabric saturation in wood-composite boatbuilding. It will outperform any other product in these applications. SilverTip Laminating Resin is designed for use with fiberglass, Kevlar, Dynel and graphite as well as on bare wood. It has superior wet-out characteristics with little tendency to foam or trap air. Both the resin and hardener are nearly colorless and are used in an easy 2:1 volumetric ratio. SilverTip Laminating Resin cures to a brilliant blush-free film with either the fast or slow hardener eliminating secondary bonding concerns as experienced with other epoxies. The working time is longer than most boat building epoxies without extending cure time. The cured film is tough and resilient with better heat resistance than other epoxies cured at room temperature. Fillers, wood flour, and bulking agents can be combined with SilverTip Laminating Resin, however, we suggest using the other members of the SilverTip Series for adhesive, filleting and fairing applications.

### Product Uses:

SilverTip Laminating Resin has been formulated as an optimized system for coating and fiberglassing wooden boats, the repair of fiberglass boats and for use with carbon fiber sporting goods & autobody parts.

### Application:

Use at a simple 2:1 volume ratio with either the fast or slow hardener. Use at temperatures as low as 35°F with no limitations on humidity. Even at lower temperatures and higher humidity this resin will not blush on curing. The medium-low viscosity of SilverTip Laminating Resin wets out fiberglass cloth quickly and allows for use “as is” for either coating or fiberglass work.

### Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:43
Total Solids .....	100%
Mixed Viscosity .....	700 cps
Mixed Color.....	Water White
Coverage (saturation coat w/ 6oz. cloth).....	150 ft <sup>2</sup> /gal (3.6 m <sup>2</sup> /L)
Maximum Service Temperature .....	160°F (70°C)
Tensile Strength, psi .....	7,900
Tensile Elongation.....	8.0%
Flexural Strength, psi .....	420,000
Flexural Modulus, psi .....	12,800
Compressive Strength, psi: at yield .....	13,000
at failure .....	26,000
Gel Time @ 77°F (25°C)	
Fast Hardener .....	26 Minutes (100g mixture)
Slow Hardener .....	60 Minutes (100g mixture)
Tack Free Time @ 77°F (25°C)	
Fast Hardener .....	3 Hours (100g mixture)
Slow Hardener .....	6 Hours (100g mixture)

# SilverTip QuikFair

## Product Description:

QuikFair is a lightweight, microballoon-filled, fast-curing two-part epoxy fairing putty with excellent moisture resistance. The two color-coded parts have a non-sagging, butter-like consistency and are easily mixed to form a third color. At 77°F (25°C) QuikFair is sufficiently cured to be hand-sanded in 3 hours or machine sanded in 4 hours. This allows the user to apply three coats each 24 hours in a standard eight-hour shift or six in a round-the-clock basis.

## Product Uses:

Use QuikFair on both fiberglass and wood-epoxy boats above or below the waterline.

## Physical Properties:

Mix Ratio by Weight .....	100:50
Total Solids .....	100%
Mixed Viscosity .....	170,000 cps
Mixed Color .....	Tan
Gel Time @ 77°F (25°C) .....	10 Minutes (100g mixture)
Tack Free Time @ 77°F (25°C) .....	3 Hours (100g mixture)



Kit sizes available:

1½ Pt  
1½ Qt  
3 Qt  
1½ Gal  
3 Gal  
7½ Gal  
15 Gal

# SilverTip GelMagic

## Product Description:

GelMagic is a toughened, non-sagging, two component, structural epoxy adhesive designed for superior bonding to wood and most porous materials. It is unique in that it starts as two self-leveling liquids, which form a soft, thixotropic, sag-resistant paste when mixed. Measuring is easily accomplished by either volume or weight. GelMagic requires no additional modification with fillers and can be applied to vertical and overhead surfaces without running, eliminating the mess and waste associated with other epoxies. GelMagic exhibits exceptionally high peel strength and employs a state of the art, two-phase epoxy morphology, which creates an adhesive bond that is tougher, more resistant to embrittlement and has better elevated temperature properties than other room temperature cured epoxy adhesives. GelMagic can be post-cured up to 140°F for even greater performance.

## Product Uses:

Specifically designed for optimum adhesive properties. Not a general-purpose resin made for coating and then modified with filler to act as an adhesive. When fully cured, it is unaffected by water, oil, kerosene, and many other chemicals. It will not stain wood and is immune to fungus and rot. GelMagic is ideal for stitch-and-glue, plywood, strip built and glued lap strake construction. Also use GelMagic as a high strength, gap filling, waterproof adhesive for general woodworking and architectural applications.

## Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:42
Total Solids .....	100%
Mixed Viscosity .....	4,000 cps
Mixed Color .....	Milky White
Coverage @ 250 microns (10 mils) .....	150 ft²/gal (3.6m²/L)
Maximum Service Temperature .....	170° F (75°C)
Lap-Shear Strength, psi:	
Polyester Laminate .....	2800
Concrete .....	1100
Wood (Maple) .....	1800
Aluminum .....	2200
Galvanized Steel .....	1900
Copper .....	1700
Gel Time @ 77°F (25°C) .....	15 Minutes (100g mixture)
Tack Free Time @ 77°F (25°C) .....	3 Hours (100g mixture)



Kit sizes available:

12 oz.  
1½ Pt  
1½ Qt  
3 Qt  
1½ Gal  
3 Gal  
7½ Gal  
15 Gal

Now available in the u-TAH  
cartridge dispensing system.  
6.45 oz



## SilverTip EZ-Fillet



Kit sizes available:

1½ Pt  
1½ Qt  
3 Qt  
1½ Gal  
3 Gal  
7½ Gal  
15 Gal

### Product Description:

EZ-Fillet is a wood flour-filled two-part putty specifically designed for stitch-and-glue wooden boat construction. Its ketchup-like, self-leveling consistency allows it to be measured by volume or weight. The resin (part A) is brick red in color while the hardener (part B) is a deep, dark green. A rich brown wood tone results when the two parts are combined indicating complete mixing. The putty thickens after mixing to form an easy to spread thixotropic compound which will not run or sag.

EZ-Fillet has been designed for superior strength and workability and can be used by itself to create smooth cosmetic fillets or as a structural fillet when combined with fiberglass cloth.

### Product Uses:

EZ-Fillet is specifically designed for both cosmetic and structural fillets in stitch-and-glue wooden boat construction.

### Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:44
Total Solids .....	100%
Mixed Viscosity .....	70,000 cps
Mixed Color .....	Red-Brown
Coverage @ 1.5 mm .....	25 ft <sup>2</sup> /Gal (0.6m <sup>2</sup> /L)
Gel Time @ 77°F (25°C) .....	60 Minutes (100g mixture)
Tack Free Time @ 77°F (25°C) .....	6 Hours (100g mixture)

## SilverTip MetlWeld



Kit sizes available:

½ Pt  
1 Pt  
1 Qt  
½ Gal  
1 Gal  
2 Gal  
10 Gal

### Product Description:

MetlWeld is a toughened epoxy adhesive designed to bond metal and other dissimilar materials such as stainless steel, galvanized steel, aluminum, copper, glass, ceramics, neoprene rubber and most porous surfaces. It will cure at temperatures as low as 60°F. MetlWeld is supplied at the correct application consistency so no additional fillers or bulking agents are needed to make it a non-sagging adhesive.

### Product Uses:

MetlWeld will bond metals to metal, wood, stone, concrete, and even glass.

### Surface Preparation:

Surfaces to be bonded should be freshly sanded and clean of grease, wax, oil and other contaminants. At 77°F allow 48 hours to cure and develop strength (longer at cooler temperatures) before subjecting to stress.

### Physical Properties:

Mix Ratio by Volume .....	100:100
Mix Ratio by Weight .....	100:91
Total Solids .....	100%
Mixed Viscosity .....	320,000 cps
Mixed Color .....	Gray
Maximum Service Temperature .....	170°F (77°C)
Lap Shear Strength, Al-Al, psi .....	2,150
Lap Shear Strength, Cold-Rolled Steel .....	2,240
Lap Shear Strength, Galvanized Steel .....	1,820
T-Peel Strength, PLI .....	28
Gel Time @ 77°F (25°C) .....	30 Minutes (100g mixture)
Tack Free Time @ 77°F (25°C) .....	4 Hours (100g mixture)

# GENERAL PURPOSE RESIN

## System Three General Purpose Resin

### Product Description:

System Three General Purpose Epoxy has excellent pot life and cure-time control. When selecting a hardener consider the minimum temperature expected during application and the required pot life. Combine different System Three General Purpose Epoxy Hardeners to provide a continuous range of cure times.

### Product Uses:

System Three General Purpose Epoxy works great for wood construction and repair, for gel coat blister repair, and for general fiberglass repair. Use at a simple 2:1 volume ratio with any of the three hardeners. Use at temperatures as low as 35°F. with no limitations on humidity. The medium-low viscosity of System Three General Purpose Epoxy allows for use "as is" for coating and fiberglass work. Combine with different fillers to make adhesives, filleting and fairing compounds.

### Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:44
Total Solids .....	100%
Mixed Viscosity (average) .....	950 cps
Mixed Color .....	Light Amber
Tensile Strength, psi .....	6,000
Tensile Elongation .....	11%
Flexural Strength, psi .....	12,500
Flexural Modulus, psi .....	350,000
Compressive Strength, psi: at yield .....	12,000
Compressive Strength, psi: at failure .....	12,500
Coverage @ 250 microns (10 mils) .....	150 Ft <sup>2</sup> /Gal. (3.6 m <sup>2</sup> /L)
Maximum Service Temperature .....	160°F (70°C)
Gel Time @ 77°F (25°C)	
#1 Hardener .....	15 Minutes (100g mixture)
#2 Hardener .....	30 Minutes (100g mixture)
#3 Hardener .....	60 Minutes (100g mixture)
Tack Free Time @ 77°F (25°C)	
#1 Hardener .....	2 Hours (100g mixture)
#2 Hardener .....	4-6 Hours (100g mixture)
#3 Hardener .....	9 Hours (100g mixture)
Minimum Temperature for Curing	
#1 Hardener .....	35°F (2°C)
#2 Hardener .....	55°F (13°C)
#3 Hardener .....	75°F (25°C)



Kits Sizes available:  
Pint (Hardener only)  
Qt  
½ Gallon (Hardener only)  
Gallon  
2½ Gallon  
5 Gallon  
Drums

# SPECIAL PURPOSE RESINS

## Clear Coat



Kit sizes available:

1½ Pt  
1½ Qt  
3 Qt  
1½ Gal  
3 Gal  
7½ Gal  
15 Gal

### Product Description:

Clear Coat is an extremely low viscosity, water white, "penetrating" epoxy system. Clear Coat cures to a brilliantly clear, very tough finish without the usual "amine blush" associated with some epoxy resin films. Clear Coat contains no volatile solvents.

### Product Uses:

Clear Coat is ideal for clear coating wood, and the wetting out of fiberglass cloth for bright finished boats. Use as a build coat for clear linear polyurethane or varnish coatings and as a penetrating first coat for blister repair on fiberglass boats. Use also for those applications that require a long pot life and low viscosity. Use Clear Coat as the sole epoxy system to make wood strip canoes and kayaks. Protect Clear Coat from moisture during cure to avoid water spotting.

### Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:43
Total Solids .....	100%
Mixed Viscosity .....	400 cps
Minimum Application Temperature.....	60°F
Heat Deflection Temperature .....	127°F
Tensile Strength, psi .....	7,800
Tensile Elongation at Break .....	8%
Flexural Strength, psi .....	12,000
Flexural Modulus, psi .....	375,000
Compressive Strength, psi:	
Yield.....	13,000
Failure.....	26,000
Coverage @ 250 microns (10 mils) .....	150 ft²/Gal (3.6 m²/L)
Gel Time @ 77°F (25°C).....	60 Minutes (100g mixture)
Full Cure @ 77°F (25°C) .....	72 Hours (100g mixture)

## SB-112



Kit sizes available:

1½ Pt  
1½ Qt  
3 Qt  
1½ Gal  
3 Gal  
7½ Gal  
15 Gal

### Product Description:

SB-112 is a clear, almost water white high-modulus epoxy system, UV-resistant for maintaining longer surface gloss. Unlike many epoxy systems, SB-112 will cure to a clear, glossy, blush-free surface.

### Product Uses:

SB-112 is specially formulated for use in building and repairing sail and surfboards over polystyrene cores. It can also be used for coating and composite laminating. SB-112 is unique in that polyester resins and gel coats may be bonded to it without the use of "tie-coats". We recommend that polyester be bonded onto freshly sanded SB-112 epoxy within 48 hours of cure.

### Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:44
Total Solids .....	100%
Mixed Viscosity .....	1660 cps
Minimum Curing Temperature.....	60°F
Heat Deflection Temperature .....	127°F
Tensile Strength, psi .....	7,800
Tensile Elongation at Break .....	8%
Flexural Strength, psi .....	12,000
Flexural Modulus, psi .....	375,000
Compressive Strength, psi:	
Yield.....	13,000
Failure.....	26,000
Coverage @ 250 microns (10 mils) .....	150 ft²/Gal (3.6 m²/L)
Gel Time @ 77°F (25°C).....	40 Minutes (100g mixture)
Full Cure @ 77°F (25°C) .....	36 Hours (100g mixture)

# MirrorCoat®

## Product Description:

MirrorCoat is a pourable, self-leveling bar and tabletop coating. It works well on many surfaces such as wood, ceramics, plaster, masonry and some plastics. MirrorCoat cures to a glossy, smooth finish that is scratch and stain resistant. Cured MirrorCoat is waterproof and unaffected by alcohol.

## Product Uses:

Follow the detailed application instructions in the MirrorCoat brochure to achieve outstanding results on bar tops and tables. Also use as a decoupage coating on cloth, leather, photos and other objects.

## Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:54
Total Solids .....	100%
Mixed Viscosity .....	2120 cps
Hardness, Shore D (72 hrs.) .....	.80
Coverage @ 1.5 mm (60 mils) .....	25 ft <sup>2</sup> /Gal (0.6 m <sup>2</sup> /L)
Heat Deflection Temperature .....	140°F (60°C)
Gel Time @ 77°F (25°C) .....	90 Minutes (100g mixture)
Full Cure @ 77°F (25°C) .....	48 Hours (100g mixture)



Kit sizes available:

1½ Pt  
1½ Qt  
3 Qt  
1½ Gal  
3 Gal  
7½ Gal  
15 Gal

## Introduction To MirrorCoat

MirrorCoat® is a two-part epoxy resin product specially designed to create a high-gloss, clear decorative coating for wood and other materials. MirrorCoat will also protect the surface from spills and denting. Products like this are sometimes referred to as bartop coatings. But unlike most bartop coatings, MirrorCoat is mixed in the ratio of two parts of resin to one part of hardener by volume. This 2:1 ratio provides a harder and more heat-resistant coating than a typical 1:1 material. MirrorCoat, like all epoxy resin coatings, will yellow slightly over time. Where the material will be exposed to considerable sunshine we recommend using a clear coating containing UV-absorbers. System Three manufactures two such products, Spar Urethane Varnish, and WR-LPU polyurethane. Do not use MirrorCoat epoxy over white backgrounds unless noticeable yellowing is acceptable.

## Understanding the MirrorCoat Process

MirrorCoat is usually applied to porous surfaces. Like any liquid, it will try to flow into the nooks and crannies and displace any air that is present. During this process the epoxy is curing, and will gradually get thicker until it becomes rubbery and finally solid. Any displaced air will try to rise through the thickening liquid. Air bubbles may not be able to rise to the surface and pop before the material cures. If this happens bubbles will be left in the cured coating. Minimize this problem by applying the material in two coats as described below. Apply MirrorCoat with a natural bristle brush on vertical surfaces. Multiple coats will be required to build up a thickness equal to the poured-on layer. New coats can be applied as soon as the current coat has gelled. MirrorCoat will attempt to level itself as it cures. Ensure the surface is level or MirrorCoat will pool on the lower portion and run off the surface. Excess MirrorCoat can drip and run over the edge of the project. Use a natural bristle brush to spread out the runs once the material stops dripping. Always use a plastic drop cloth on the floor when working with this product. Any airborne dust that lands on a curing epoxy surface will float and leave a small bump in the cured coating. To minimize this problem work as much as possible in a dust-free environment. For best results vacuum the area so that dust isn't stirred up while applying MirrorCoat. Clean the surface using lint free rags dampened with paint thinner. Allow all the thinner to evaporate before application. Avoid tack cloths as they leave a waxy residue, which may interfere with the epoxy bond. After application, turn off fans and air conditioning, and leave the room so that the air in the room stays as still and dust-free as possible. If dust can't be eliminated during application, MirrorCoat may be sanded and polished to a high gloss after curing is complete.

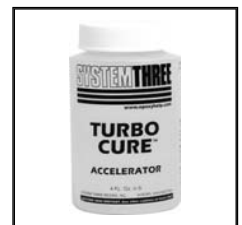
# Turbo Cure

## Product Description:

Turbo Cure is an accelerator designed to speed up resin cure during cold weather.

## Product Uses:

Use a maximum of 1 fluid ounce per quart of mixed resin. It will cut the cure time of Clear Coat or SB-112 by half.



Sizes available: 4 oz.

½ Pt.  
Pt  
1 Qt  
1 Gal

# Phase Two



Kit sizes available:

1 Gal  
3½ Gal  
7 Gal  
17½ Gal  
35 Gal  
70 Gal  
140 Gal

## Product Description:

Phase Two is an ultra high modulus toughened two-Phase epoxy system for composite cored construction. It requires at least a two-hour 140°F post cure to reach ultimate properties. It is the best wet-lay-up resin available anywhere. Phase Two's very long pot life makes it ideal for vacuum bagging.

## Product Uses:

Use Phase Two Epoxy for building foam and balsa cored boat hulls; sailboards and high-tech composites where the skin laminates carry the load. It is not intended for the coating or bonding of wood. Boats built with Phase Two are often faired with SilverTip QuikFair. Use Phase Two Epoxy only for the skin laminates and cored structural frames and/or bulkheads.

## Physical Properties:

Mix Ratio by Volume .....	100:40
Mix Ratio by Weight .....	100:33
Mixed Viscosity .....	920cps
Heat Distortion Temperature (°C) .....	64
Hardness, Shore D .....	83
Tensile Strength, psi .....	9600
Tensile Elongation at Break .....	7.5%
Flexural Strength, psi .....	19,000
Flexural Modulus, psi .....	515,000
Compressive Strength .....	32,000
Coverage @ 250 microns (10 mils) .....	150 Ft²/Gal(3.6 m²/L)
Gel Time @ 77°F (25°C) (100g mixture) .....	105 Minutes
Mold Open-time @ 77°F (25°C) (100g mixture) .....	3-4 Hours
Full Cure @ 77°F (25°C) (100g mixture) .....	5-6 Hours
Full Cure @ 140°F (60°C) (100g mixture) .....	2 Hours

## Product Usage Chart

	LAMINATING	ADHESIVE	COATING	MOLDING	FILLETING & FAIRING	CONSISTENCY	COLOR	CLEANUP
SilverTip® Resin	✓✓✓	✓	✓✓✓	✓✓	✓	POURABLE	COLORLESS	1
SilverTip® GelMagic	NR	✓✓✓	NR	NR	NR	GEL	BLUE	1
SilverTip® Quikfair	NR	NR	NR	✓	✓✓✓	PUTTY	TAN	1
SilverTip® Mett weld	NR	✓✓✓	NR	NR	NR	THICK LIQUID	GRAY	1
SilverTip® EZ Fillet	NR	✓	NR	NR	✓✓✓	PUTTY	BROWN	1
MirrorCoat™	NR	✓	✓✓✓	✓✓	✓✓	POURABLE	COLORLESS	1
QuickCure®	NR	✓✓✓	NR	NR	✓✓	THICK LIQUID	AMBER	1
T-88®	NR	✓✓✓	NR	NR	✓✓	THICK LIQUID	AMBER	1
Phase Two®	✓✓✓	NR	✓	✓	✓	POURABLE	WHITE	1
SB-112	✓✓✓	✓	✓✓✓	✓✓	✓	POURABLE	COLORLESS	1
General Purpose Resin	✓✓✓	✓✓	✓✓✓	✓✓	✓✓	POURABLE	AMBER	1
RotFix	NR	✓	✓✓✓	NR	✓	THIN LIQUID	AMBER	1
Sculpwood	NR	NR	NR	✓✓✓	✓✓✓	PUTTY	BROWN	1

### LEGEND:

✓✓✓	Excellent
✓✓	Good
✓	Fair
NR	Not Recommended
1	Lacquer Thinner, Isopropyl Alcohol
2	Water
3	Mineral Spirits

# ADHESIVES

## Quick Cure® 5 & 15

### Product Description:

Quick Cure-5 is the standard quick setting "five minute epoxy" system. Mix at a 1:1 by volume ratio. Quick Cure is ideal for all small jobs requiring a strong bond and rapid cure. Quick Cure is highly water resistant but not waterproof. Quick Cure is quite thick, but is easily measured by squeezing equal sized lumps from the convenient application bottles or from the u-TAH cartridge.

Now available with a 15 minute cure time, when a little longer working time is needed.

### Product Uses:

Use Quick Cure for installing bungs, repairing missed staple holes prior to fiberglassing, "tack welding" wood, and for those other glue jobs, which require a fast cure. Do not use below the water line unless protected by an over coating like SilverTip Laminating Resin, STR General Purpose Epoxy, Clear Coat, etc.

### Physical Properties:

Mix Ratio by Volume .....	100:100
Mix Ratio by Weight .....	100:97
Total Solids .....	100%
Mixed Viscosity .....	9,500 cps
Tensile Lap-Shear Strength(Aluminum/Aluminum), psi .....	2845
Heat Deflection Temperature .....	101°F (38°C)
Gel Time @ 77°F (25°C)	
Quick Cure 5 .....	2 - 3 Minutes (30g mixture)
Quick Cure 15 .....	10 - 12 Minutes (30g mixture)
Tack Free @ 77°F (25°C)	
Quick Cure 5 .....	5 Minutes (30g mixture)
Quick Cure 15 .....	30 Minutes (30g mixture)

Quick Cure 5 now available in the u-TAH cartridge dispensing system.  
8.45 oz



Kit sizes available:

½ Pt  
1 Pt  
1 Qt  
½ Gal  
1 Gal  
2 Gal  
10 Gal

## T-88®

### Product Description:

T-88 is a high-performance, non-brittle, two-part epoxy adhesive designed to give superior results under adverse conditions. The adhesive may be used without modifications in normally fitted joints, and will cure in any thickness without shrinkage. T-88 is clear amber and becomes virtually invisible when varnished. T-88 exhibits outstanding adhesion and permanence on a wide variety of materials, and is endorsed by leading designers, builders and organizations.

### Product Uses:

For well over 25 years T-88 has been the most widely used structural adhesive for marine and general woodworking use in the United States. Mixed at a 1:1 by volume ratio, T-88 will cure at temperatures as low as 35°F. When fully cured, it is unaffected by water, oil, kerosene, and many other chemicals. It will not stain wood and is immune to fungus and rot. T-88 is unique in that it may be applied to damp wood, provided it is worked well into the surface.

### Physical Properties:

Mix Ratio by Volume .....	100:100
Mix Ratio by Weight .....	100:83
Total Solids .....	100%
Mixed Viscosity .....	9,000 cps
Tensile Strength, psi .....	7000
Flexural Strength, psi .....	11,500
Lap-Shear Strength, psi: <i>Polyester Laminate</i> .....	2800
<i>Concrete</i> .....	1100
<i>Wood (Maple)</i> .....	1800
<i>Aluminum</i> .....	2000
<i>Galvanized Steel</i> .....	1800
<i>Copper</i> .....	1650
Lap-Shear Strength vs. Temperature: (Aluminum Tensile Shear):	
67°F .....	2500 psi
75°F .....	2000 psi
150°F .....	1300 psi
180°F .....	1000 psi
Heat Deflection Temperature, F° .....	119°F (49°C)
Coverage .....	80 Ft <sup>2</sup> /Gal
Gel Time @ 77°F (25°C) .....	60 Minutes (100g mixture)
Full Cure @ 77°F (25°C) .....	4 - 6 Hours (100g mixture)

Now available in the u-TAH cartridge dispensing system.  
8.45 oz



Kit sizes available:

½ Pt  
1 Pt  
1 Qt  
½ Gal  
1 Gal  
2 Gal  
10 Gal

# WOOD RESTORATION

## RotFix



Kit sizes available:

1½ Pt  
1½ Qt  
3 Qt  
1½ Gal  
3 Gal  
7½ Gal  
15 Gal

### Product Description:

RotFix is an easy to use, low viscosity epoxy wood sealer, primer, and consolidant for repair and restoration of rotted, deteriorated, dried out or spongy wood. RotFix is a component of The EndRot System. It creates a sound, waterproof base for restoration filler putty. A unique measuring/application bottle is included with each 24 ounce RotFix kit. With this bottle you can accurately measure, mix and apply RotFix in batches from 2 ounces to 7 ounces.

### Product Uses:

Use RotFix to penetrate deep into deteriorated and rotted wood creating a strong, solid base for restoration. After RotFix application, replace missing sections with System Three SculpWood putty.

### Physical Properties:

Mix Ratio by Volume .....	100:50
Mix Ratio by Weight .....	100:43
Total Solids .....	100%
Mixed Viscosity .....	600 cps
Mixed Color .....	Amber
Hardness, shore D (24 hr.) .....	75
Gel Time @ 77°F (25°C) .....	60 Minutes (100g mixture)
Cure Time @ 77°F (25°C) .....	8 Hours (100g mixture)

## SculpWood



Kit sizes available:

½ Pt  
1 Pt  
1 Qt  
½ Gal  
1 Gal  
2 Gal  
10 Gal

### Product Description:

SculpWood is the epoxy putty component of The EndRot System. SculpWood is a 2-component, solvent free, kneadable epoxy resin putty. It is moldable, carvable, lightweight, strong, and exhibits excellent adhesion to a variety of substrates. It is easily sanded and will accept paint, screws and nails. It is most commonly used in conjunction with System Three RotFix, a low viscosity wood sealer and consolidant.

### Product Uses:

Use SculpWood for replacing missing sections of window sills, frames and furniture or for adding new sections to existing structures.

### Physical Properties:

Mix Ratio by Volume .....	100:100
Mix Ratio by Weight .....	100:100
Total Solids .....	100%
Mixed Color .....	Brown
Gel Time @ 77°F (25°C) .....	1 Hour (100g mixture)
Tack Free Time @ 77°F (25°C) .....	6 Hours (100g mixture)

## QuikStix



This new epoxy wood putty comes in 1.5oz. and 3oz. Dark and Natural tubes. It's a two-part epoxy sleeved into one ready to use stick. Just cut off the amount needed and knead until color is uniform. Apply within 5 minutes to fill nail holes, stripped screw holes, scratches, gouges, cracks or knot holes. Great for repairing furniture, molding and frames. Once cured QuikStix can be drilled, sanded, sawed, tapped, rasped, machined and painted.

QuikStix 1.5oz. Natural or Dark

QuikStix 3oz. Natural or Dark

# Board Defense

## Product Description:

Board Defense is an EPA registered insecticide, termiticide and fungicide concentrate for the control of wood destroying insects and rot. It is a very versatile product for the protection and treatment of wood against all wood destroying organisms. Board Defense is a water-soluble white powder. It can be used dry or in solution to form an effective penetrating solution. There are no hazardous solvents and no odors. The active ingredient in Board Defense, Disodium Octaborate Tetrahydrate, is a borate derivative that will not break down over time. Borates have been used as a safe and effective pest control for over 40 years. Board Defense is an important part of the System Three EndRot System for wood rot repair.

## Product Uses:

Board Defense is effective against decay, fungi, termites, beetles, carpenter ants, cockroaches, ants, silverfish and crickets. Board Defense is a slow acting stomach poison to insects and an instant contact poison to wood rot and fungi. As wood destroying insects and their larvae carry on their normal activities, they accumulate Board Defense in their systems. A buildup of Board Defense eventually poisons the insect. Board Defense is used as the first step in System Three Resins' EndRot System for wood rot repair to make sure that the wood destroying organisms are destroyed before it is repaired and patched.

Board Defense is applied as a dust or solution for treatment of wood against wood destroying organisms and for general insect and fungus control. When applied as a solution, Board Defense will use the moisture present in wood to penetrate deep into the board. Since Board Defense does not break down, the active ingredient will be drawn deeper into the wood over time. This provides long lasting and effective protection.



### Package Sizes:

2 ounce bag  
(Makes 1 pint of liquid)  
1 pound bag  
(Makes 1 gallon of liquid)

# Impel® Rods

## Product Description:

Impel Rods are easy, low-cost and EPA approved as a decay protection and prevention system for wood. They have an appearance similar to glass rods and are available in a variety of sizes for a wide range of applications. Impel Rods are molded from fused, water-diffusible borates which are internationally recognized as an effective and well established wood preservative. Borates also effectively control termites, carpenter ants, a variety of beetles, and many other wood boring insects. They are user friendly and environmentally acceptable. Borates are highly toxic to fungal decay and many insects at concentrations that are not poisonous to humans or other mammals. Impel Rods are an important part of System Three Resins' EndRot System for wood rot repair.

## Product Uses:

Use Impel Rods in all areas where wood is exposed to moisture. These high exposure areas include: Flooring and Foundation Systems. The greatest risks for decay are at exposed wood end grain and at wood joints where moisture is more readily absorbed than on side surfaces. Other areas of concern are where joists rest on block piers; at band sills around dirt-filled porches; at untreated deck headers; and at foundation sites near chimneys. Window and Door Framing: Anywhere weathering of paint and exposure has occurred especially at the bottom of windows and doors is at risk of decay. Exterior Steps, Porches and Decking: Install Impel Rods in posts, rails, wood ends, joints and trim. Roof Trim and Facia: Facia boards supporting gutter systems and soffits are especially vulnerable to decay attack. Also protect areas where trim is in contact with skylights, vents, chimneys and where excessive moisture is common. Roof and Attic: Install Impel Rods where leaks have caused water damage to support members and rafters. Log Construction: Impel Rods should be installed wherever logs are not protected from the elements. Poles and Posts: Install Impel Rods where moisture may cause decay; especially in building and foundation poles; and farm and residential fence posts. Installation of Impel Rods is an important preventative step in System Three Resins' EndRot System for wood rot repair.



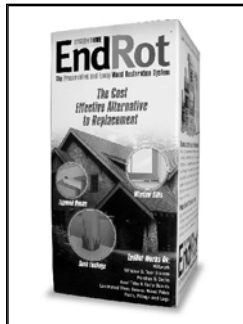
### Package Sizes:

1/4 x 1/2" – 6 Rods  
1/4 x 1/2" – 24 Rods  
1/3" x 2 5/8" – 24 Rods  
1/3" x 1" – 24 Rods  
1/2 x 2" – 12 Rods  
1/2 x 4" – 12 Rods  
3/4 x 3" – 12 Rods

Impel Rods are placed into holes drilled in wood at key locations. As the Rods dissolve, the borate preservative migrates to areas of highest moisture and concentrates where wood is most susceptible to decay. If the wood dries the Rods stop diffusing. The residual preservative remains in place. When the moisture content rises the Rods resume diffusion. Depending upon conditions of moisture, Impel Rods need not be replaced for years. A chart included in each package that shows recommended rods sizes and spacing for each type of installation. There are three easy steps to installing Impel Rods:

1. Drill appropriate sized holes to accommodate the predetermined number and size of Impel Rods required.
2. Insert the suitable size and number of Impel Rods into the holes.
3. Seal the holes with treated wooden dowel, wood filler (like SculpWood) or caulk. Paint if desired.

# EndRot Kit



## Contents:

- 6 ea. IMPEL® Rods
- 2 oz. Board Defense®
- 2 oz. RotFix® Resin
- 1 oz. RotFix Hardener
- 8 oz. SculpWood® Resin
- 8 oz. SculpWood Hardener
- 2 pair Gloves
- 1 ea. Literature Pack

## Product Description:

Why replace when you can restore? Rot is a fungus and it can spread quickly, infecting, and then destroying sound wood in its path. Replacement can be expensive or time consuming and sometimes nearly impossible. Cutting out the rotten areas may not remove all of the “infected” wood which will continue to rot.

There is a better way: The EndRot system, for Complete Wood Repair and Restoration. With The EndRot system, you can: 1) Stop the progression of wood rot/decay fungi in your home; 2) Restore rot or insect damaged wood; and 3) Protect your investment for many, many years.

## Product Uses:

The EndRot Trial Kit contains enough material to complete a typical repair to a window or door severely damaged by rot, weather, and sun. For larger or multiple repairs, RotFix, SculpWood, Board Defense and Impel Rods are available individually, in larger sizes

## Physical Properties:

See individual products.



# COATINGS

## System Three Spar Urethane Varnish

### Product Description:

Spar Urethane Varnish is a high solids finish designed for marine and exterior surfaces. This product contains ultraviolet light absorbers, which offer excellent protection from sun, salt air and water.

### Product Uses:

Use on boats, outdoor furniture, doors or any surface where a clear gloss is desired.

### Physical Properties:

Total Solids by Weight.....	55%
Mixed Viscosity .....	200 cps
Mixed Color.....	Very light Amber
Coverage .....	350 Ft <sup>2</sup> /Gal (7.5 m <sup>2</sup> /L)
Tack Free @ 77°F (25°C) .....	4 Hours
Re-Coat Time @ 77°F (25°C).....	12 - 24 Hours
Full Cure Time @ 77°F (25°C).....	7 Days



Kit sizes available:

Qt

Gal

## WR-155 Primer

### Product Description:

WR-155 Primer is a high-build, waterborne two-part epoxy primer specifically formulated as a sandable base for System Three Resins' topcoats. WR-155 contains corrosion inhibitors and is opaque and lead-free. It will provide performance equal to its solvent-borne counterparts, in corrosion protection, film-build and sandability. In addition, it is non-flammable and contains no hazardous air pollutant solvents (HAPS) or heavy metals. It is low VOC and cleans up with water.

### Product Uses:

WR-155 Primer may be used over polyester or epoxy resin surfaces, and properly prepared wood, metal, and cementitious surfaces. Use the primer to provide a smooth, uniform surface for the System Three polyurethane WR-LPU Topcoat. Additionally, it may be used to help poor hiding topcoats look uniform and opaque.

### Physical Properties:

Mix Ratio by Volume .....	4:1
Mix Ratio by Weight .....	5:1
Total Solids by Weight.....	58%
Mixed Viscosity (Krebs Units) .....	110 KU
Mixed Color.....	Gray or Off-White
Coverage .....	250 Ft <sup>2</sup> /Gal (6.5 m <sup>2</sup> /L)
Pot Life @ 77°F (25°C) .....	6 Hours
Re-Coat Time @ 77°F (25°C).....	6 Hours minimum
Cure Time @ 77°F (25°C) .....	72 Hours



Kit sizes available:

Qt

Gal

# WR-LPU Topcoat



Available in Qt. & Gal.:  
(Each kit contains topcoat  
and crosslinker)\*  
Clear Gloss  
Clear Satin  
Orcas White  
Decatur Black  
Whidbey White  
San Juan Tan  
Bainbridge White  
Vashon Gray  
Camano Red  
Mercer Green  
Lopez Blue  
Shaw Blue  
Sinclair Yellow  
Fox Orange

## Product Description:

WR-LPU Topcoat is a two-part linear polyurethane coating specifically formulated for maximum performance and ease of use. Available in 12 standard colors as well as clear satin and high gloss. When cured it is moisture, solvent and fuel resistant. WR-LPU contains UV absorbers and will not yellow or lose gloss for years, depending on exposure. WR-LPU product kit contains a can of paint and a bottle of crosslinking material. The paint by itself cures to a very high-quality coating, without the crosslinker, however, the addition of the crosslinking material produces a tougher and more durable film. It will be more chemical and fuel resistant, have better gloss retention and generally last longer than a film cured without the crosslinker.

## Product Uses:

Use WR-LPU for both interior and exterior surfaces. It is not intended for continuous below waterline use. Used as a clear finish without the primer, it can beautify and protect wood from discoloration and degradation.

## Physical Properties:

Mix Ratio by Volume .....	2 oz./Gal (15ml/L)
(Approximate 8 drops WR-LPU Crosslinker 30ml)	
Solids by Weight .....	36%
Mixed Viscosity (Krebs units).....	75 - 80 KU
Application Temperature Range.....	55°F - 90°F (12°C - 32°C)
Coverage .....	350 - 400 ft <sup>2</sup> /Gal (8m <sup>2</sup> /L)
Pot Life @ 77°F (25°C) .....	8 Hours
Drying Time @ 77°F (25°C).....	60 Minutes
Re-Coat Time @ 77°F (25°C) (no crosslinker) .....	14 Days Maximum
Re-Coat Time @ 77°F (25°C) (with crosslinker) .....	24 Hours Maximum

*\*The colors on our websites' downloadable color card are close representations to the actual paint colors. However, since monitors and printers vary, do not rely on the electronic color card for an exact match. If you would like our printed color card mailed to you, please contact us.*

# ACCESSORIES

## Measuring & Mixing Tools

### Graduated Cups & Mixing Tubs

Our graduated cups and mixing tubs are inexpensive and accurate when used correctly.

1 oz. 25 & 100 pack

3 oz. 12 & 100 pack

4½ oz. 20 pack

12 oz. 12 & 100 Pack



### Plunger Pumps

Sometimes called “mustard pumps”, these dispensers fit on the top of our 16oz. (473mL), 32oz. (1.9 L), ½ Gal (1.9 L), Gal (3.8 L), 2.5 Gal (9.45 L), and 5 Gal (19 L) containers. We recommend the pumps be used to dispense only. **Not recommended for measuring resins.** Dispense into a measuring cup. The plunger pump works well with SilverTip Laminating Resin, General Purpose Epoxy Resin, Clear Coat and SB-112 (*not for use with Quick Cure, T-88 or MirrorCoat*).

Available in singles or pairs



### Syringes

This 10cc & 60cc syringe can be used to inject mixed epoxy into cracks or apply a small bead of glue.



### Mixing and Stirring Sticks

Wooden tongue depressor (6") for mixing up to 32oz. (1 L)

Mixing sticks packages of 25 or a Box of 500

Paint stir sticks, each



### Jiffy Mixer

This is a very effective 2½" diameter stainless mixer on a 15" shaft. Attached to a drill motor this is a fast, efficient tool for mixing large batches of epoxy or paint. The sides of the mixer are protected so they will not gouge into the sides or bottom of your mixing container.



### My Weigh i500 Scale

My Weigh i500 Compact Professional scale is for use with materials that are difficult to measure by volume. Ideal for QuikFair and small liquid epoxy batches (1/3 fl. oz.). Weighing fillers insures that consistent results are obtained from batch to batch. Features include auto shut-off, auto zero tracking, auto calibration, auto backlight, 0.1 gram division-professional accuracy, g/oz/ozt/dwt conversion, The My Weigh scale comes with a two-year factory warranty, just return to the manufacturer for replacement. Batteries included. The only accurate way of measuring out proper ratio epoxy putties and thick compounds is to My Weigh it.



### Caulking Gun

System Three offers a high quality caulking gun capable of reliably dispensing higher viscosity epoxy adhesives. For use with the u-TAH cartridge delivery system.



### u-TAH Mixing Tips

Disposable static mixer for the u-TAH cartridge. This patented product ensures superior mixing performance and allows the operator to be closer to the work piece. The square geometry consists of a series of alternating left-and right-hand elements with intermittent flow inverters which effectively channel the fluids from the walls into the center of the mixer.

## Applicators

### Squeegees



Epoxy will not stick to these re-usable polyethylene squeegees. These can be cut and trimmed to make filleting tools and even notched with pinking shears for spreading epoxy glue over large areas. We offer small (2½ x 4½") single sided and large (3½ x 6") double sided squeegees. We also offer a large rubber (3½ x 6") Thalco type for big fiberglass jobs and a larger (36" x 3½") rubber Thalco for cutting into custom sizes.

### Brushes



Use brushes of good enough quality so they don't leave hairs on your surface, but don't spend so much money that you can't afford to throw them away. Don't waste your time and money trying to clean brushes with expensive and hazardous solvents.

½" Chip Brush, each & box of 36

1" Chip Brush, each & box of 36

2" Chip Brush, each & box of 24

3" Chip Brush, each & box of 24

### Foam Brushes



These brushes are too light to spread epoxy glue. They are excellent for "knocking out" the bubbles in rolled epoxy coatings, and great for "tipping in" when painting or varnishing.

2" Foam Brush – each & box of 24

3" Foam Brush – each & box of 12

### Acid Brushes



6" long 3/8" wide stiff brush of black horsehair clamped in a galvanized handle. Use to get epoxy into hard to reach holes, nooks and crannies.

6 pack or box of 144

### Nylon/Polyester Brushes



We recommend these high quality brushes for the application of our WR-155 Primer and WR-LPU Topcoats.

2", each

3", each

### Foam Roller Covers



These yellow foam rollers are the primary tool for coating and fiberglassing wood, along with rolling epoxy barrier coats on fiberglass boats. They apply about a 3 mil coating of epoxy without runs or sags. Available in 7" widths, cut them in half for use on the 3" wide frame.

7", 2 pack, each

7", 1 dozen covers

7", 10 dozen covers

### Roller Frames & Roller Tray



The roller tray is a durable black flexible plastic. After remaining epoxy has cured, flex the tray and the hardened epoxy will pop off the surface for many more uses.

3" Frame, each

7" Frame, each

Roller Tray, plastic, each



# Safety Supplies

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The primary hazard when working with epoxy is skin sensitization resulting from prolonged and repeated direct skin contact. Work clean and keep epoxies off your skin. Never use a solvent to clean your skin. This dries out the natural protective oils in your skin, then thins out the epoxy and drives it in further. We highly recommend using disposable latex gloves.

## Gloves

Disposable corn starch dusted vinyl gloves  
Size Large - Pkg of 12 pairs (24 gloves)  
Box of 50 pairs (100 gloves)



## Dust Mask

Simple, double strap dust masks that are used when sanding wood, fiberglass, or cured epoxy.

NOTE: These masks will not protect you from solvent vapors or other gaseous substances from the atmosphere.

Pack of 2  
Box of 50



## Protective Skin Cream

SBS 46 protective skin cream is resistant to oils and organics, but can be removed by water. Do not use under gloves.  
5oz. tube



## Medicated Skin Cream

SBS 40 medicated skin cream will help replace the oils in your skin.  
5oz. tube



## Waterless Hand Soap

SBS 30 Waterless hand soap is used to remove epoxy that you get on your skin. This hand soap will emulsify the resin and hardener so that it may be rinsed off with water.  
1 lb. tub



## Tyvek Suits

These are tough full body suits with hoods and elastic wrist and ankle cuffs that professional painters use. We only stock the larger size because most people prefer them with a loose fit.

Tyvek Suit, XXL, each



# FILLERS



If you want to avoid using fillers we recommend that you try our SilverTip Marine Epoxy Series. Each of these products has been specifically formulated and is packaged with all additives including the correct fillers for each marine epoxy application.

Always mix epoxy resin and hardener together at the correct ratio before the addition of fillers. The following fillers work well with System Three General Purpose Epoxy. Be sure to read The Epoxy Book for a complete discussion and guidelines on using fillers and additives.

## Silica Thickener

This material is also referred to as colloidal silica, and is an excellent thixotropic agent which is used to control the viscosity of mixed epoxy systems. Silica can be used alone for a very smooth, non-sagging, high strength mixture or combined with fillers or fibers to make them non-sagging. A 5 quart quantity of Silica Thickener when combined with 1 gallon of mixed epoxy/hardener, will produce about 1.75 gallons of a non-sagging firm paste.

Sizes: 32oz. (946 ml) / 5 Qt. (4,730 ml)

## Quartz Microspheres

Called "Q-Cells" or white microballoons, these are light-weight and tough microscopic quartz spheres. Used for the same purpose as phenolic microballoons, some users prefer these because of their lighter color. A 5 quart tub added to 2 quarts of mixed epoxy and hardener will yield about 1 gallon of filleting/fairing compound. Silica Thickener should be added to prevent sagging. Not recommended for gluing.

Sizes: 32oz. (946 ml) / 5 Qt. (4,730 ml)

## Wood Flour

Wood Flour, a fine sawdust that has been filtered so that there are no lumps, is excellent for creating glues and structural fillers and fillets. It is a fibrous filler that is also thixotropic. To make a smoother fillet, some users add a small amount of Silica Thickener.

Sizes: 32oz. (946 mL) / 5 Qt. (4,730 mL) / 50lbs (22.72 kg)

## Plastic Minifibers

Plastic Minifibers are fibrous and add thixotropy. A 5 quart tub added to 2 quarts of mixed epoxy and hardener will yield about 1.5 gallons of a non-sagging firm paste. This material is especially recommended for making a gap-filling adhesive.

Sizes: 32oz. (946 mL) / 5 Qt. (4,730 mL)

## Phenolic Microballoons

These bulking agents are hollow, purple-brown microscopic phenolic spheres that make a low-cost, low density filler. Added to epoxy resin and hardener mix, they make a good, light-weight fairing compound with good compressive strength. Mixture can be blended with a small amount of Silica Thickener to prevent sagging. Not recommended for gluing.

Sizes: 32oz. (946 mL) / 5 Qt. (4,730 mL)

## Microballoon Mix

Phenolic Microballoon bulking agents and Silica Thickener pre-blended at the correct ratio for a non-sagging filleting/fairing compound. Not recommended for gluing.

Sizes: 32oz. (946 mL) / 5 Qt. (4,730 mL)

## Chopped Glass Strand

This is a .25 inch long chopped fiberglass strand. Makes a very coarse structural filler. Use Silica Thickener with this to prevent sagging.

Sizes: 32oz. (946 mL) / 5 Qt. (4,730 mL)

## Milled Glass Fiber

This will make a thick, jelly-like paste which is sometimes called "liquid fiberglass". The addition of Silica Thickener will prevent sagging or draining. Added to fillets it will improve their tensile strength.

Sizes: 32oz. (946 mL) / 5 Qt. (4,730 mL)

## Graphite Powder

Use this metallic gray-black powder to make black epoxy coatings for boat bottoms. Some say that a sanded epoxy filled graphite bottom offers less water resistance and friction. Drift boat builders add this to their bottom coating for mar-resistance. Also used as a pigment to simulate the appearance of traditional deck seams. Add up to 30% by volume. Graphite powder mixed with epoxy tends to sag, so more than one coat may be needed for proper coverage.

Note: Graphite is a conductor of electricity and may cause electrolysis when immersed in salt water in contact with metals.

Sizes: 1 lb. can

## Non-Skid Powder

White gritty polycarbonate. Sprinkle onto wet WR-LPU to produce a non-skid surface. One quart will cover about 200 square feet.

Sizes: 1 Qt. Tub

## Color Paste Pigments

Clear epoxy adhesives and coatings can be colored easily. We offer concentrated pigment pastes, dispersed in epoxy resins, which can be added in any quantity.

	2oz.	4oz.	32oz.
BLACK	x	x	x
WHITE	x	x	x
RED	x	x	
YELLOW	x	x	
BLUE	x	x	
GREEN	x	x	
BROWN	x	x	



Add the paste to the epoxy resin side (PART A), then measure that mixture in the proper proportion with the hardener (PART B). If added according to these suggestions, the colored pigments will not detract from any of the properties of clear epoxy.

# FIBERGLASS

## Reinforcing Fiberglass Fabrics

System Three Resins offers a large selection of woven and non-woven fabrics for general and special use. Most wooden boats require some woven cloth and perhaps tape. Wooden boats which use molded chine construction greatly benefit from the use of biaxial tape. Composite cored boatbuilders use non-woven biaxial, triaxial, or unidirectional cloth for their hulls.

### Woven Fiberglass Cloth and Tape

This cloth is the standard "E" glass volan finished boat cloth from the very best weavers. A variety of widths and weights are available. Tapes and cloths have a selvaged edge so the edges don't get stringy or fray. Cloth rolls have a nominal length of 125 yards, but may vary. Tape rolls are 50 yards in length.

#### Glass cloth, cut lengths

4 ounce, 50 inches wide  
6 ounce, 38 inches wide  
6 ounce, 50 inches wide  
6 ounce, 60 inches wide  
10 ounce, 50 inches wide

#### Glass tape, cut lengths

9 ounce, 2 inches wide  
9 ounce, 3 inches wide  
9 ounce, 4 inches wide  
9 ounce, 6 inches wide

### Non-Woven Biaxial Tape

This is a heavy duty, double-bias fiberglass tape. Two opposing layers of fibers run through this cloth "on the bias" or at 45 degrees to the run of the roll. The very best for molded chine construction. The 24 ounce is 17 ounces of biaxial cloth backed up with 7 ounces of epoxy compatible mat. The mat keeps the edges of the tape from getting "stringy" and unruly. The 12 ounce tape or "bias" tape has no mat backing.

#### Non-woven Cut Lengths Biaxial Tape

12 ounce, 6 inches wide, no mat  
24 ounce, 4 inches wide, w/mat  
24 ounce, 5 inches wide, w/mat  
24 ounce, 8 inches wide, w/mat  
24 ounce, 10 inches wide, w/mat

### Non-Woven Biaxial and Triaxial Cloth

Fibers in the biaxial cloth run the same as the fibers in the tape described above. There is no mat backing on either one of these cloths. The triaxial cloth has a third layer of fibers that run "with the roll" in addition to the 2 opposing layers which run at a 45 degree angle to the run of the roll.

12 ounce, 50 inches wide, double bias cloth  
20 ounce, 50 inches wide, triaxial cloth (3 yd minimum)  
34 ounce, 50 inches wide, triaxial cloth (3 yd minimum)

### Unidirectional Cloth

This 12 inch wide unidirectional fabric is non-woven and runs in one direction only. Available in carbon fiber and "S" glass only, this is used mostly in composite cored construction. The carbon fiber is used in wooden boats to stiffen wooden rudders, dagger boards, and masts.

"S" Glass, 8 ounce, 12 inches wide cut  
Carbon fiber, 8 ounce, 12 inches wide, cut

### Peel Ply

This is a tough, lightweight, woven nylon fabric that will not stick to cured epoxy. Squeegee over wet epoxy laminates. The excess epoxy will soak through the peel ply. After cure, remove the peel ply and you are left with a surface that is ready for painting or secondary bonding (needs no sanding). Use Peel Ply cut into strips to cosmetically finish fillets, molded chines, and seams.

Peel Ply, 60 inches wide

## Estimated Usage for SilverTip Laminating Resin

The following will serve as a guide for estimating the amount of epoxy you'll need. The key to any estimate is a reasonably accurate idea of the surface area involved. The numbers given are in square feet of coverage per gallon of mixed resin and hardener except as noted. Divide by 40 to convert figures to square meters per liter.

Coating wood	Softwood Plywood/ Veneer	Hardwood Plywood/ Veneer	Vertical surface- maximum non-sag	4 ounce cloth	6 ounce cloth	10 ounce cloth	Biaxial Tape
First coat	250	325	500	150	130	100	32
Subsequent coat	400	400	500	300	250	170	40

# FAQ'S

## Frequently Asked Questions

**Problem: The System Three Resin Part A has turned hazy and has white material in the bottom of the jug.**

Cause and solution: The epoxy is crystallizing due to storage at temperatures 50°F and below. Immersing the closed container in hot tap water and heating to 120°F or above will bring the resin back to a clear state.

**Problem: The epoxy isn't curing.**

Cause and solution: Resin and hardener were mixed at the wrong ratio. Resin was mixed with resin or hardener with hardener. Remove the uncured material thoroughly by scraping and solvent washing. Mix at proper ratio and reapply.

**My epoxy resin is taking too long to cure.**

**How can I speed it up?**

The only way to speed the cure of our epoxy resin products, once they've been applied, is to heat the room or the area that your project is in. Every 18°F increase in temperature cuts the time it takes for the resin to cure in half.

**Problem: The epoxy keeps going off in the pot.**

Cause and Solution: The batch is too big or left too long in the pot. The hardener is too fast for the conditions. Use a smaller batch and get it out of the pot sooner. Change to a slower hardener.

**Problem: The epoxy is still gummy.**

Cause and Solution: The ratio was wrong. It was inadequately mixed. Not enough time has elapsed at the curing temperature. Make sure that the gumminess is not just the amine blush. Wait and see if the cure proceeds. Apply some heat if possible. If it is still gummy then remove the uncured material thoroughly by scraping and solvent washing. Mix at proper ratio and reapply.

**Problem: The epoxy is hard but it clogs the sandpaper.**

Cause and solution: Remove the amine blush. Wait a few more hours for further curing. Use a coarser grit paper or use wet/dry paper with water.

**Question: Can I color System Three epoxies?**

Yes. The preferred method is with System Three paste pigments. If you can't find them at your dealer, or can't wait to order them from the factory, you can use up to 2% by weight of universal paint colorants from the paint or hardware store.

**Problem: The top surface of the epoxy coating turned white.**

Cause and Solution: It got wet from dew or rain before it cured. Apply heat and the whiteness will probably disappear. If not, remove by sanding.

**Problem: The glue joints came apart.**

Cause and solution: Too much clamping pressure was used. No filler was used in the epoxy. The joints were stressed before sufficient curing. Use less pressure. Use some filler. Leave the part clamped longer especially if it will be under stress when removed.

**Problem: The fiberglass cloth didn't go clear.**

Cause and solution: The type of cloth is wrong. Buy the cloth from us or use an epoxy compatible cloth with a looser weave. Air may have been dispersed into the epoxy by excessive squeegeeing. Frothy squeegeed epoxy may have been used to wet out areas.

**Problem: The paint/varnish won't dry.**

Cause and Solution: The wrong type of paint is being used. Read the section on painting in The Epoxy Book to understand and correct the problem.

**Question: Can I add more hardener to accelerate the cure time?**

No. The ratios are set so that all the chemicals will react and cure. More hardener or resin will result in uncured epoxy.

**Question: How do I clean up epoxy?**

Cured epoxy must be removed by heat softening, paint stripper or sanding.

Uncured epoxy can be removed with lacquer thinner.

**Question: Will System Three epoxies damage polystyrene or urethane foam?**

No. Our coating and laminating resins are designed to go directly over solvent-sensitive substrates without any fear of softening or "melting" them.

**Which epoxy for my canoe?**

This is the common question asked by bright finish strip plank builders. The answer is that either SilverTip or Clear Coat Epoxy will do a fine job. Clear Coat Epoxy is thinner and will wet fiberglass faster than SilverTip Laminating Resin. On the other hand, it will take more coats to fill the weave. Both SilverTip Laminating Resin and Clear Coat Epoxy are free of amine blush. Some builders use Clear Coat epoxy for fiberglass application and SilverTip Laminating Resin for filling the weave.

## Wooden Boat Building Methods

### Lapstrake

Bottom edge of one plank overlaps and is fastened to top edge of next. Frames are usually steam-bent, and plank seams left uncaulked.

### Strip

Narrow strips of wood are edge-fastened or glued; no caulking is necessary. It's strong enough that small craft can be built without frames.

### Cold Molded

Wood veneers are diagonally laminated over a mold with epoxy resin. Requires little framing and no caulking.

### Stitch-and-Glue

Plywood panels are sewn at seams with ties (wire/plastic), then seams are taped with fiberglass set in epoxy. Also known as Tack-n-Tape.

## CUSTOMERS' NEEDS ARE OUR INSPIRATION

When developing a new product it is the needs of our customers that serve as our inspiration. We do not tie ourselves down with a single methodology but work thoughtfully to incorporate components and processes that allow us to make true state-of-the-art formulated chemical products.

Boats have always been the heart and soul of System Three. Our slogan, "Boat Building Launched Our Company" is as meaningful today as ever as we continue to develop products for an ever changing manufacturing environment.

Whether you are a custom one-off builder, home hobbyist, repair technician or production builder, System Three has dedicated the past thirty years to developing a truly outstanding line of products to meet your needs.



## MARKET SPOTLIGHT

We have developed over 500 unique formulations, many developed for highly specialized industries, others for products we use everyday. We are proud of our customers and the markets we serve.



**Aerospace**



**Fishing**



**Sporting Goods**



**Restoration**



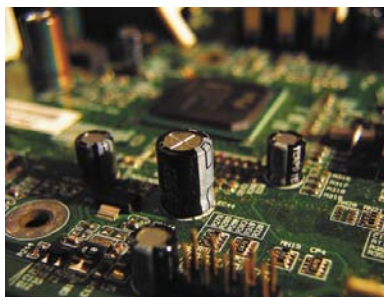
**Agricultural**



**Marine**



**Woodworking**



**Electronics**

## A Whole New Delivery System

Simplicity in epoxy adhesive use has finally arrived! Just drop System Three's new cartridge into a standard size caulking gun, add a mixer tip, squeeze and apply. What could be easier?

Only need a little bit and don't want to use a tip? Then squeeze out some into a cup, mix and apply. In either case the cartridge properly measures the resin and hardener and can never get the ratio wrong. After you're done put the cap back on and the cartridge is ready to go whenever you next need it.



Three different epoxy adhesives to choose from:  
QuickCure 5, T-88 Structural Adhesive, SilverTip GelMagic

• **Products with Purpose** •



**SYSTEMTHREE**<sup>®</sup>  

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**PREMIUM ADHESIVES & COATINGS**

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