POLY EPOXY
STRUCTURAL EPOXY SYSTEM

Poly Epoxy is a true high-performance epoxy resin with unmatched tensile, compressive, and flex strengths. It also has unbeatable peel, shear, and fatigue resistance, as well as impact strength and fracture behavior. It's great for wings, canards, fuselages, tail feathers, and landing gear. Use it in molds or moldless construction. It parts easily and works beautifully in vacuum bagging. (Avoid silicone-treated peel ply.) It has TWO cure phases, while all other resins—epoxy, polyester, or vinyl-ester—have just one. The two phases occur all by themselves during the curing process. The resulting bond is tougher and stronger than any other.

Poly Epoxy Kit, quart.....P/N 01-07905..... **$32.75**
Poly Epoxy Kit, gallon .....P/N 01-07906..... **$119.75**
Poly-poxy Resin Gallon .....P/N 01-07934 ..... **$68.75**
Poly-poxy Hardener Quart .....P/N 01-07935 ..... **$39.75**
Poly-poxy Hardener 40 Gl .....P/N 01-07933 ..... **$2,855.00**

POLY EPOXY TECHNICAL DATA

Mechanical Properties:	w/Post Cure	w/o Post Cure
Tensile Strength, PSI	9600	8800
Elongation at Break, %	7.5	3.6
Tensile Modulus, PSI	470,000	460,000
Flexural Strength, PSI	19,000	14,500
Flexural Modulus, PSI	515,000	500,000
Compressive Strength, PSI	32,000	33,000
Shore D Hardness	82	70
Glass Transition Temp., °C	72	62
Heat Distortion Temp., °C	64	50
Water Immersion Weight Gain, % (140 °F, 30 days)	2.8	2.9

Rheology: Mixing Ratio: 3 parts Resin to 1 part Converter by Weight 10 parts Resin to 4 parts Converter by Volume

Kinetics:

Pot Life, 100 grams..... 105 mins 1 quart.....75 mins
Mold Open Time.....3-4 hrs Tack Free Time..... 5-6 hrs

AVAILABLE EXCLUSIVELY FROM AIRCRAFT SPRUCE

ALPHA POXY
NON-STRUCTURAL EPOXY SYSTEM

AlphaPoxy is a low-cost flexible epoxy system that is ideal for laying up non-structural parts like wheel pants, or fairings. Because it is flexible, we don't recommend it for structural applications, such as fabricating load-bearing structural aircraft parts. Use PolyEpoxy for these applications. This is a low-viscosity system specifically formulated for filling with microballoons, cotton flox, or milled glass fibers to make slurries. It was designed for maximum sandibility; when cured, it is soft enough to be easily cut with sandpaper smoothing a breeze. AlphaPoxy is also excellent when used as a final filler resin over structural parts when an epoxy gel coat is called for. You can use it in place of polyester resins for a much more durable part at a very attractive price.

AlphaPoxy Kit, 1-1/4 gallon.....P/N 01-07911 ..... **$87.00**
AlphaPoxy Hardener, gallon.....P/N 01-07909 ..... **$64.75**
AlphaPoxy Resin, 7/8 gallon .....P/N 01-07912 ..... **$48.50**
AlphaPoxy Hardener, 5 gal. pail.....P/N 01-07910 ..... **$323.75**
AlphaPoxy Hardener, 3/8 gallon .....P/N 01-07908 ..... **$32.75**
AlphaPoxy Resin, 5 gal. pail .....P/N 01-07913 ..... **$242.50**
Rheology: Mixing Ratio:
2 parts Resin to 1 part Hardener by Weight

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AEROPOXY PT1105 EPOXY SURFACE COAT

PT1105 is a white, general purpose room temperature epoxy surface coat resin. The creamy,smooth consistency of the mixed material allows easy application to the model surface with minimum drag. The thixotropic properties of PT1105 permits good coverage on points and sharp cor ners, and application to vertical surfaces without sagging. Due to the non-galling nature of PT1105, it will give good service in a variety of metal forming applications. When used with Part B hardener, the PT1105 system will cure quickly, and can be sanded or filed in 10 to 12 hours. The cured material is tough, with good chip resistance on edges and sharp details. PT1105 works very well in the fabrication of plastic faced plaster patterns when used with PT1105 B1 hardener.

Quart Kit .....P/N 09-05263 ..... **$44.85**
Gallon Kit.....P/N 09-05264 ..... **$147.75**
Gallon Pail Kit.....P/N 09-05265 ..... **$563.00**

E-Z POXY
EPOXY LAMINATING SYSTEMS

In early 1996, Composite Design Co. developed E-Z Poxy to provide a replacement epoxy system for Epolite (Safe-T-Poxy) which is no longer produced by Hexcel. The E-Z Poxy series of laminating systems utilizes one resin and your choice of three hardeners for varying pot life and viscosity requirements. The E-Z Poxy systems offer the same handling and physical properties as the discontinued Epolite systems including ease of use, long pot life, rapid cure for demold or process continuation, and superior room temperature curing properties. Excellent for use in sport aviation, marine, and industrial applications.

E-Z 83 hardener is equivalent to Safe-T-Poxy standard hardener, E-Z 84 is equivalent to Safe-T-Poxy II hardener, and E-Z 87 is equivalent to Safe-T-Poxy slow hardener. E-Z Poxy products should not be mixed with materials produced by other epoxy manufacturers.

E-Z POXY PRICE LIST

Description	Part No.	Price
E-Z Poxy 1-1/2 gal. kit* EZ 83 Hardener	01-07850	**$222.95**
E-Z Poxy 5 gal. kit** EZ 83 Hardener	01-07950	**$1,006.00**
E-Z Poxy 1-1/2 qt. kit EZ 83 Hardener	01-08050	**$64.75**
E-Z Poxy II 1-1/2 gal. kit* EZ 84 Hardener	01-08850	**$192.95**
E-Z Poxy II 5 gal. kit** EZ 84 Hardener	01-08950	**$798.00**
E-Z Poxy 1 gal. resin	01-00245	**$109.75**
E-Z Poxy 5 gal. resin	01-00246	**$439.00**
E-Z Poxy 1/2 gal. Hardener	01-00247	**$113.75**
E-Z Poxy II 1/2 gal. Hardener	01-00248	**$96.75**
E-Z Poxy 2-1/2 gal. Hardener	01-00249	**$413.00**
E-Z Poxy slow 1/2 gal. Hardener	01-00253	**$111.75**

*** 8 lbs. resin, 3.5 lbs hardener ** 40 lbs. resin, 18 lbs. hardener**

E-Z POXY TECHNICAL DATA
E-Z POXY RESIN SYSTEMS FROM COMPOSITE POLYMER DESIGN

E-Z 10 Epoxy Resin
E-Z 83 Aromatic Amine Hardener
E-Z 84 Aromatic Amine Hardener
E-Z Aromatic Amine Hardener

E-Z 10 Resin (Viscosity* 1500 cps @ 77F with:

Hardener	EZ 83	EZ 84	EZ 87
Mixed Properties:			
Mixed Viscosity cps @ 77F*	1300	800	1500
Viscosity Hardener cps @ 77F*	410	140	830
Pot Life @ 77F	2 hrs.	2 hrs.	5 hrs.
Tack Free @ 77F	4 hrs.	8 hrs.	8 hrs.
Cure Time @ 77 F	24 hrs.	3 days	3 days
Mix Ratio by Volume	100/47	100/47	100/47
Mix Ratio by Weight	100/44	100/44	100/44
Physical Properties Tg (F):			
R/T	151	151	142
P/C*	196	196	196
Elongation %	3.5	3.5	3.9
Specific Gravity	1.14	1.13	1.14
Linear Shrinkage @ 23C (4 days %)	.10	.10	.10
Tensile Strength PSI			
R/T	8,200	8,100	8,400
P/C	10,000	10,000	10,000
Tensile Modulus (PSI x 10 -5)	4.8	4.2	4.0
* Viscosity may vary +/- 10%			
*Post Cure for 2 hrs. @ 150F			

E-Z Poxy systems provide excellent room temperature curing systems for hand layup of composite parts and tooling. The systems are designed to provide ample working time with the varied pot life options while providing a rapid finish cure. Post curing these systems will increase their physical properties as designated in the above data, however, post cure is not required.