



AeroMarine Products, Inc.
8659 Production Avenue
San Diego, CA 92121
(877) 342-8860

www.aeromarineproducts.com
info@aeromarineproducts.com

AeroMarine 1150 Epoxy

AeroMarine 1150 Epoxy is a high performance gray epoxy adhesive, excellent for repairing concrete and filling cement cracks. Our 1150 Epoxy is also used in the manufacture and repair of aircraft, boats, sporting goods, and industrial products. It bonds wood, metals, fiberglass, and most hard plastics. Finally, AeroMarine 1150 epoxy is also widely used for electronic potting and encapsulation applications.

***It is not recommended for use on polyethylene, polypropylene, Tedlar, anodized aluminum, EPDM or Teflon.*

Features:

- Long work life
- Room temperature cure
- Low viscosity
- Simple, noncritical 1-1 mix ratio

Specifications:

Mixed Viscosity:	3000cps maximum
Color:	Gray
Work life:	45-60 minutes@70F
Cure time:	24 hours@70F
Shear strength:	2500psi
Tensile Strength	8000 psi
Flexural strength:	12,800psi
Modulus of elasticity:	5.7×10^6

Directions for use:

Mix the resin and hardener in equal parts by weight or volume. AeroMarine 1150 Epoxy begins to gel in about 45-60 minutes, depending on the size of the batch and the temperature.

NOTE: You must shake the container of gray resin vigorously for 60 seconds before mixing it with the hardener in order to maintain color dispersion. Also, you must shake or turn the container of gray resin weekly to keep the color from settling.

Apply to clean, dry, non-oily surfaces. Cleaning with acetone, isopropyl alcohol, or MEK is recommended. Sanding or abrading surfaces generally increases bond strength.

If applying 1150 epoxy for concrete repair, you must first clean the area thoroughly by vigorous sweeping or using "air in a can" before applying 1150 epoxy.

For industrial or professional use only

AeroMarine Products (hereinafter "seller") makes no warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether the seller's product is fit for a particular purpose and suitable for a user's particular method of application. Many factors can affect the use and performance of seller's product. Given the variety of factors that can affect the use and performance of seller's product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the seller's product to determine whether it is fit for a particular purpose and is suitable for the user's method of application.

Seller shall not be liable for any loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.



AeroMarine Products, Inc.
8659 Production Avenue
San Diego, CA 92121
(877) 342-8860

www.aeromarineproducts.com
info@aeromarineproducts.com

Best practices when using epoxy resin

Never mix less than about 3 ounces of product. When manufacturers design and test their resins they normally write the specifications for 100 gram batches, which is about 3 ounces. There are two bad things that can happen when mixing a smaller batch. Because the sample is small, it is much more difficult to get the mix ratio correct. Also, these mixtures are exothermic, meaning that they generate heat in order to cure. A tiny batch does not generate enough heat to cure the resin properly.

Avoid mixing a large batch- At least until you are familiar with the product. The larger the batch, the more exotherm or heat is generated in the cure cycle. If you are casting a large part, consider mixing small batches to make the process more manageable. Thickness of the pour also affects the exotherm and cure speed. 3/8" is about the maximum thickness to pour most epoxies.

Don't vary the mix ratio- Old style polyester resins were catalyzed with a chemical called MEKp. You could vary the mix ratio to get different reaction speeds. Modern epoxies, polyurethanes, and silicones are different. They don't use a true "catalyst", but have a different kind of reaction method. *Varying the mix ratio results in a mess!*

Consider mixing everything twice- especially if you are a beginner. Mix the two components together, then transfer the mixture to another container and mix them again. The theory is that the liquids clinging to the sides and bottom of the containers don't get mixed well. By transferring the mixture to another container, you are assured that everything is well mixed.

Mix in plastic containers. Paper cups contain moisture which may adversely affect the resin, especially polyurethanes. Avoid waxed paper cups.

Avoid mixing with drill motors. Mixing with an electric drill can cause a few problems. Frequently they don't get into every corner of the mixing container. Also, if they spin too fast they can generate friction in the resin causing it to exotherm out of control resulting in premature curing. Powered mixing also can generate a lot of air bubbles.

For industrial or professional use only

AeroMarine Products (hereinafter "seller") makes no warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether the seller's product is fit for a particular purpose and suitable for a user's particular method of application. Many factors can affect the use and performance of seller's product. Given the variety of factors that can affect the use and performance of seller's product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the seller's product to determine whether it is fit for a particular purpose and is suitable for the user's method of application.

Seller shall not be liable for any loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.



AeroMarine Products, Inc.
8659 Production Avenue
San Diego, CA 92121
(877) 342-8860

www.aeromarineproducts.com
info@aeromarineproducts.com

Storage- Epoxy hardeners usually last forever. Epoxy resins; however, tend to freeze even at fairly high temperatures, sometimes into the fifty degree Fahrenheit range. If allowed to freeze, “epoxy ice” can form in the container. It usually looks like swirls of white stuff suspended in the resin. It can be reconstituted by warming at 120F for a couple of hours- or you can use the “non-ice” part of the epoxy.

Spraying- Epoxies DO NOT spray well. They tend to run off vertical surfaces when sprayed.

Clean-up- Aerosol carburetor cleaner to clean up spills and messes. Otherwise, about any solvent will work, including acetone, MEK, toluene, xylene, and lacquer thinner. Avoid regular paint thinner (mineral spirits). To clean hands, use “Fast Orange” hand cleaner available in automotive supply stores.

Thinning- *Thinning is not recommended for most applications.* There are very few exceptions. The most common acceptable use of a thinner is when using epoxy to penetrate wood. In this case about 10% is a good amount of thinner to use. Keep in mind that thinners are flammable, so spread the epoxy promptly after thinning to keep the exothermic heat from building up.

Test- Always make a test to determine the feasibility of your process. There are many unforeseen factors that can affect the outcome of your project. Running a controlled test may be inconvenient, but it can make the “Learning Curve” of processing these products much easier.

For industrial or professional use only

AeroMarine Products (hereinafter “seller”) makes no warranties, express or implied, including, but not limited to, any implied warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether the seller’s product is fit for a particular purpose and suitable for a user’s particular method of application. Many factors can affect the use and performance of seller’s product. Given the variety of factors that can affect the use and performance of seller’s product, some of which are uniquely within the user’s knowledge and control, it is essential that the user evaluate the seller’s product to determine whether it is fit for a particular purpose and is suitable for the user’s method of application.

Seller shall not be liable for any loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including, but not limited to, contract, negligence, warranty, or strict liability.