Product Datasheet

Epoxiseal™

CLEAR, EPOXY TABLE TOP COATING AND SEALER

Epoxiseal™ is a low viscosity, 1 to 1 by volume room temperature curing epoxy coating system. It cures to a clear, glass like finish that resists scratching and yellowing. The system demonstrates excellent antiblushing properties and will not distort with age.

Epoxiseal™ is water clear, but can be supplied with pigments or transparent dyes if required for your application and many of its other properties can be modified to accommodate your requriemenrts. Variation available including faster setting versions, modified viscosities, and and increased flexibility. Please contact us to discuss your application if you're interested in evaluating a version customized for your application.

SUGGESTED APPLICATIONS:

- Coating wood, ceramic, and many other materials
- Water and chemical resistant sealer for many surfaces

HANDLING PROPERTIES	VALUE	TEST METHOD
Epoxiseal Part A		
Visual Appearance	Clear Liquid	
Density	1.16 g/cm³	ASTM E-201
Viscosity, Part A, @ 25ºC	11,000 cps	ASTM D-2393
Epoxiseal Part B		
Visual Appearance	Clear liquid	
Density	0.95 g/cm³	ASTM E-201
Viscosity, Part A, @ 25ºC	850 cps	ASTM D-2393
Mix Ratio - part by weight	100A:81B	
Mix Ratio - part by volume	1A:1B	
Mixed Viscosity @ 25ºC, initial	2,500 cps	
Pot life (150 grams) @ 25ºC	35 minutes	
Cure Schedules:	Full cure in 3-7 days at room temperature or 4-6 hours @ 65C*	

*Note: many other cure schedules are possible. Please contact us for assistance if you'd like to consider an alternate cure schedule.

PHYSICAL PROPERTIES (Tested at 25C unless otherwise noted – cured 7 days @ 250C)		TEST METHOD
Appearance	Clear solid	Visual
Hardness, Shore D @ 25°C	78	
Tensile Strength at Break	9,500 psi	ASTM D-638
Tensile Modulus	425,000 psi	ASTM D-638
Tensile Elongation at Break	4%	ASTM D-638

Compressive Strength	10,500 psi	ASTM D-695
Flexural Strength at Break	12,500 psi	ASTM D-790
Flexural Modulus	420,000 psi	ASTM D-790
Heat Deflection Temp., room temp cure.	105ºF / 40.5ºC	
Heat Deflection Temp., heat cured	115ºF / 46.1ºC	
Moisture absorption, % weight gain)		ASTM D-570
24 hours @ 25°C	0.85%	
4 hours in boiling water	1.70%	
Izod Impact, Notched,	0.55 ft-lb/in	ASTM D-2214

NOTE : Values are based on laboratory or average production results – not for specification purposes.

PROCESSING AND APPLICATION INSTRUCTIONS :

Epoxiseal can be mixed using Meter-mix dispensing, or manually, as follows: Weigh the desired amount of Part A into mixing container whose weight has been tared. Then weigh the desired amount of Part B into mixing container with the Part A. Mix thoroughly by means of mechanical mixer or manual stirring. We suggest mixing for at least 1-2 minutes, with frequent scrapping of the sides and bottom of the mixing container to ensure a thorough mix. For best results, after 2 mintues of mixing, pour contents of mixing container into a second container and mix again for 1 minutes. This “double cup” method will hepf ensure that there is no unmixed material that could lead to soft spots, streaks, or tackiness. When the Epoxiseal is completely mixed apply as follows:

For most applications, the thoroughly mixed Epoxiseal should be applied in two stages. The first stage is a seal coat that seals any porosity, and prevents air bubbles from forming in the following flood coats. The seal coat should be brushed on in a thin layer and allowed to set for 4-8 hours before the second stage or flood coat is applied. When ready the flood coat is applied by pouring directly from the mixing container. (For best results do not scrape material from the sides and bottom of the mixing container as this material is the least likely to be thoroughly mixed.) Clean brushes or squeegees can be used to help spread the epoxy out evenly over the surface. The flood coat should be applied no thicker than 1/8" thick, but as many flood coat layers as desired can applied to produce the desired thickness. Simply allow each flood coat to set for 4 – 8 hours before applying the next layer. One to three flood coats is the average usage for most table or bar coatings.

Recoating/Between Layers:

Recoating can usually be be done within 4 to 8 hours. If re-coated within this time period no sanding is necessary between layers. If your previous layer has dried for more than 8 hours, light sanding with 220 or 320 grit sandpaper to achieve a good bonding surface. After sanding you should wipe down with a solvent such as denatured alcohol, acetone, MEK or lacquer thinner to remove any dust and impurities from the surface. (do NOT use mineral spirits)

Imbedding Pictures:

Objects, such as pictures, maps etc. can be imbedded in the Epoxiseal during the pours. Most photos and other high quality paper objects do not require any special preparation. However sometimes thin paper objects or those with soluble inks should first be sealed with white glue or similar product to prevent the Epoxiseal from penetrating the paper or causing the ink to run.

Imbedding Solid Objects (wood, rocks, shells, etc.)

All porous materials should first have a seal coat of Epoxiseal applied. This will prevent air bubbles from occurring in subsequent flood coats. Usually the objects can be set in place before sealing.

Working Conditions:

For best results the product should be used at temperatures from 70-80 degrees F. The room which you are working should be clean, dry, dust and insect free. Settling dust can often cause blemishes on the glassy surface.

- **Coverage:**

  One gallon of mixed Epoxiseal will cover about 16 square feet at 1/8" thick (1 flood coat layer). Seal coat layers will typically be about 1/32" thick an so 1 gallon of material will cover about 48 square feet for a seal coat.

PACKAGING AVAILABLE:

This product is available in a wide range of package sizes including quarts & 5-gallon pails. It can be supplied pre-mixed and frozen in syringes or in custom kit sizes on request. Please contact us to discuss your preferred packaging if a custom packaging solution would be of interest.

STORAGE GUIDELINES:

Store the Epoxiseal parts A & B in a clean, cool and dry environment in its tightly closed original containers. Protect from extended exposure to temperatures below 15ºC (59ºF) to prevent crystallization. If crystallization occurs, heat the entire container for 2- 4 hours at 70ºC to re-liquefy the material. Also protect from exposure to extended moisture or high humidity. Tightly re-seal containers after use. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

HANDLING PRECAUTIONS:

Follow all mandatory and recommended industrial hygiene procedures whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

Epoxiseal Part A

CAUTION! May cause eye or skin irritation and possible allergic skin reaction with prolonged or repeated exposure. Do not get in eyes, on skin, on clothing. Avoid breathing vapor or mist. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

Epoxiseal Part B

DANGER! May be corrosive to skin or eyes. May cuase allergic reaction with prolonged or repeated exposure. Harmful if swallowed, or if absorbed through skin. Do not get in eyes, on skin, on clothing. Avoid breathing vapor or mist. Keep container closed when not in use. Use with adequate ventilation wash thoroughly after handling.

FIRST AID

In case of contact:

Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

DISCLAIMER:

IMPORTANT: The following supercedes Buyer's documents. SELLER / MANUFACTURER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller / Manufacturer be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results presented are based on controlled or laboratory work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended

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