

VersaRez 9108

Standard Undiluted Epoxy Resin Technical Data Sheet (TDS)

PRODUCT DESCRIPTION

VersaRez 9108 is a low viscosity Epoxy Resin based on the reaction of Bisphenol A and Epichlorohydrin. VersaRez 9108 can be crosslinked with appropriate curing agents (hardeners) to produce desired properties such as chemical resistance, adhesive, Tg, and/or mechanical properties. VersaRez 9108 is a very high quality, high purity, and low color (Clear) Epoxy Resin.

VersaRez 9108 requires a hardener to cure into a solid, mixed at the appropriate ratio and stoichiometry.

APPLICATION DATA SUMMARY

See Application Instructions for complete information on surface preparation, equipment, environmental conditions, application procedures, and safety precautions. For conditions outside the specifications or limitations described, contact Wolverine Coatings Corporation for details.

SURFACE PREPARATION

Coating performance is directly related to the quality and degree of surface preparation. Prior to overcoating, all surfaces must be clean, dry, undamaged, and free of all contaminants. For more specific information, consult the surface preparation section contained in the Application instructions.

SAFETY PRECAUTIONS

Read the Safety Data sheet carefully before use. Safety precautions in the SDS should be carefully followed during storage, handling and use. Improper use and handling can be hazardous to health and cause fire or explosion. For further information, please refer to our "Epoxy Resin Safety Handling Guide".

TYPICAL USES

- * Composite Repairs
- * Adhesives
- * Coatings
- * Casting, Potting, and Encapsulation

BENEFITS

- * Very high quality, high purity manufacturing process that yield very good color and clarity
- * Excellent adhesion to steel, concrete and fiberglass substrates when combines with appropriate hardeners
- * Low cured shrinkage
- * VOC compliant

APPLICATION INFORMATION

Surface Preparation: All surfaces shall be clean and dry, free of dust, dirt, oil or any other foreign matter. Steel surfaces shall be abrasive blasted to SSPC SP-5, or NACE #1 "white metal" finish with a minimum 3.5 mil surface profile. Concrete surfaces shall be abrasive blasted to remove all laitance and other surface contaminants. For additional information regarding surface preparation specifications and techniques, please contact our technical services department.

PROPERTY	VALUE	TEST METHOD (If applicable)
Finish	Gloss	ASTM D523
Color (Gardner)	Clear (1-2)	ASTM D1544
Flexural Modulus (Stiffness)	Refer to Curing Agent Technical Data Sheet	ASTM D790
Flexural Strength	Refer to Curing Agent Technical Data Sheet	ASTM D790
Compressive Strength	Refer to Curing Agent Technical Data Sheet	ASTM D695
Elongation	Refer to Curing Agent Technical Data Sheet	ASTM D638
Coefficient of Friction	Refer to Curing Agent Technical Data Sheet	ASTM D2047
Hardness (7 Days)	Refer to Curing Agent Technical Data Sheet	ASTM D2240
Abrasion Resistance (Taber)	Refer to Curing Agent Technical Data Sheet	ASTM D4060
Bond Strength (Concrete)	Refer to Curing Agent Technical Data Sheet	ASTM D4541
Bond Strength (Steel)	Refer to Curing Agent Technical Data Sheet	ASTM D4541
Impact Resistance (in./lbs.)	Refer to Curing Agent Technical Data Sheet	ASTM D5420

Chemical Resistance *Depends on curing agent selection

I - Immersion/Continuous Service	Xylene	S	Sodium hydroxide, 10%	S
C - Secondary Containment (72 Hr)	1,1,1 Trichloroethane	S	Sodium hydroxide, 50%	S
S - Splash/Spill	MEK	S	Battery acid	S
N - Not Recommended	Methanol	S	Sulfuric acid, 10%	S
	Ethyl alcohol	S	Sulfuric acid, 70%	S
	Skydrol	S	Hydrochloric acid, 10%	S
	Sodium Hydroxide, 10%	S	Vinegar (5% Acetic acid)	S

TECHNICAL DATA

Epoxide Equivalent Weight (g/eq):	185-192	
Epoxide Group Content (mmol/kg):	5200-5500	
Color (APHA):	10-50	
VOC Content:	Zero	
Viscosity @ 25°C (mPa•s)	1,200 cps	
Density (25°C, g/ml)	1.15-1.18	
Shelf Life (Months)	30	
* Unopened, Undamaged, Stored Properly		

SHIPPING DATA

Packaging:	5 Gallon Pail, 55 Gallon Drum		
DOT Class (resin) - Non regulated, Class 55			

CHEMICAL RESISTANCE

VersaRez 9108 is a standard Epoxy Resin. Chemical Resistance is determined by Hardener choice and stoichiometry (desired mix ratio).

GENERAL LIMITATIONS

Do not apply over a wet surface.

Epoxies have limited ultraviolet resistance which may cause them to chalk, lose gloss, and / or discolor over time.

Touchup or repair of an existing coating is never aesthetically perfect.

Depending on mix design and curing / drying conditions of concrete, minimum age of concrete prior to application is 28 days.

SAFETY

For your safety, all required personal protection equipment should be used when operating machinery or handling chemicals. Concrete dust is a source of silica particles and other hazardous materials that can cause silicosis and other illnesses. Proper safety equipment and methods are the responsibility of the installation company, general contractor, and/or facility owner.

WARRANTY

Wolverine Coatings Corporation warrants its products to be free from defects in material and workmanship. Wolverine Coatings Corporation's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Wolverine Coatings option, to either replacement of products not conforming to this Warranty or credit to the Buyer's account in the invoiced amount of the nonconforming products. Any claim under this warranty must be made by the Buyer to Wolverine Coatings in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life, or one year from the ship date, whichever is earlier. Buyer's failure to notify Wolverine Coatings of such nonconformance as required herein shall bar Buyer from recovery under this warranty.

Wolverine Coatings makes no other warranties about the product. No other warranties, whether expressed, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply.

Any recommendation or suggestion relating to the use of the products made by Wolverine Coatings, whether in its technical literature, or in response to specific inquiry or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for the Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedure of use, or extrapolation of data may cause unsatisfactory results.

LIMITATION OF LIABILITY

Wolverine Coatings Corporation's liability on any claims based upon Wolverine Coatings Corporation's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or parts thereof which give rise to the claim. In no event shall Wolverine Coatings Corporation be liable for consequential or incidental damages.

LITERATURE REVISION - TDS: VersaRez 9108 - Rev. 191203

Published literature is subject to change without notice. Wolverine Coatings Corporation is constantly engaged in the testing of existing formulations, the development of new innovative technologies, and the evaluation of the latest practices. The latest literature should always be consulted at www.wolverinecoatings.com.



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