

Technical Data Sheet

EPI-REZ™ Resin 3522-W-60

Product Description

EPI-REZ™ Resin 3522-W-60 is a nonionic, aqueous dispersion of a solid epoxy resin similar to EPON™ Resin 1002F, with an epoxide equivalent weight of 550 to 650 and a Durran's melting point of 75 to 85 °C. EPI-REZ 3522-W-60 is supplied at a moderate viscosity and is mechanically stable. No organic solvents are present. EPI-REZ 3522-W-60 is completely water reducible, providing for a wide latitude in viscosity reduction. This dispersion is thixotropic; therefore, viscosity readings vary with the spindle speed of the viscometer (see Figure 1).

Sales Specifications

Property	Value	Unit	Test Method
Particle Size	1.1 - 3.4	µm	SRC - 1
pH	7 - 9		ASTME70
Solids	58.5 - 60.5	%	ASTMD1259
Viscosity	8000 - 18000	cP	ASTMD2196
Weight per Epoxide	615 - 715	g/eq	ASTMD1652

Typical Properties

Property	Value	Unit
Pounds/Gallon	9.2	lbs/gal
Solvent	Water	

General Information

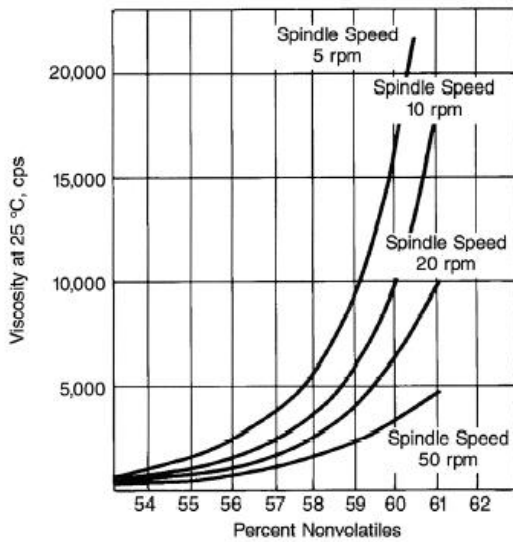
EPI-REZ 3522-W-60 offers a solvent-free approach to the formulation of film adhesives, fiberglass reinforced plastics, chemical resistant pipe, and electrical dip coatings and varnishes. In addition, EPI-REZ 3522-W-60 can be used in the formulation of coatings where conventional solvent based epoxy resins are normally used.

EPI-REZ 3522-W-60 can also be used in formulations which are traditionally water based and require improved chemical and water resistance. Examples of such applications are fiber finishes and industrial textile applications.

EPI-REZ 3522-W-60 can be cured through both epoxy functionality and hydroxyl functionality. Curing agents most conveniently employed are those which are water soluble or dispersible and are stable in an aqueous medium. Examples of such curing agents include dicyandiamide, various substituted imidazoles, aliphatic and aromatic amines, melamine resins, and ureaformaldehyde resins.

When applied at room temperature, EPI-REZ 3522-W-60 does not form a continuous film after evaporation of the water. However, upon the application of heat (~170 °F) the resin system will readily coalesce to a smooth coating.

Figure 1/ Effect of Dilution on Viscosity¹



¹ Data collected on a Brookfield RVT viscometer and a #5 spindle at 25°C.

Safety, Storage & Handling

Please refer to the SDS for the most current Safety and Handling information.

Please refer to the Hexion web site for Shelf Life and recommended Storage information.

For ease of handling and optimum shelf life, epoxy dispersions should be stored in tightly sealed containers at temperatures between 50°F (10°C) and 100°F (37.8°C). Do not allow the product to freeze. To prevent skinning or surface drying, do not leave the product uncovered for extended periods of time. If the need arises to store partially filled drums, replace the plastic top-sheet onto the surface of the liquid product. With extended storage or shipping, some settling may occur. In general, material should be lightly and thoroughly agitated before use to ensure uniformity.

Exposure to these materials should be minimized and avoided, if feasible, through the observance of proper precautions, use of appropriate engineering controls and proper personal protective clothing and equipment, and adherence to proper handling procedures. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheet (SDS) for these and all other products being used are understood by all persons who will work with them. Questions and requests for information on Hexion Inc. ("Hexion") products should be directed to your Hexion sales representative, or the nearest Hexion sales office. Information and SDSs on non-Hexion products should be obtained from the respective manufacturer.

Packaging

Available in bulk and drum quantities.

Contact Information

For product prices, availability, or order placement, visit the "Contact Us" section of our website. For literature and technical assistance, visit our website at:

www.Hexion.com/epoxy