

# Technical Data Sheet

## EPI-REZ™ Resin 5520-W-60

### Product Description

EPI-REZ™ 5520-W-60 Resin is a nonionic, aqueous dispersion of urethane modified epoxy resin with a typical epoxide equivalent weight of 540. Supplied at a nominal 60 percent nonvolatiles, EPI-REZ 5520-W-60 has a moderate viscosity and is mechanically stable. No organic solvents are present. EPI-REZ 5520-W-60 is completely water reducible, providing wide latitude for viscosity reduction. Since this dispersion is thixotropic, viscosity readings will vary with spindle speed. (See Figure 1).

### Typical Properties

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

### Sales Specifications

Property	Value	Unit	Test Method
Particle Size	0.6 - 1.2	µm	SRC - 1
pH	3 - 5		ASTME70
Solids	57 - 59	%	ASTMD1259
Viscosity	2000 - 15000	cP	ASTMD2196
Weight per Epoxide	480 - 560	g/eq	ASTMD1652

### Processing/How to use

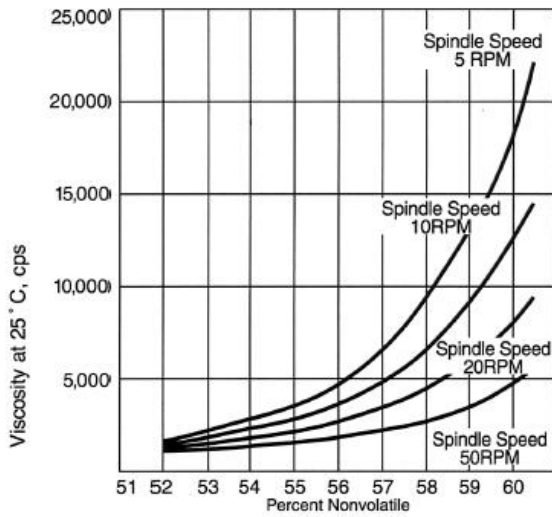
#### General Information

EPI-REZ 5520-W-60 offers a solvent-free approach to the formulation of film adhesives, fiberglass reinforced plastics, and electrical dip coats and varnishes. It may also be incorporated in formulations which are traditionally water based and which require good strength and outstanding chemical or water resistance. Examples of such applications are fiber finishes and industrial textile applications. When compared to standard epoxy resins, EPI-REZ Resin 5520-W-60 will provide improved chemical resistance and thermal properties.

EPI-REZ 5520-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 which are stable in an aqueous medium. Examples of such curing agents include dicyandiamide, substituted imidazoles, aliphatic and aromatic amines, melamine resins and urea formaldehyde resins.

When applied at room temperature, EPI-REZ 5520-W-60 does not form a continuous film after evaporation of the water. However, upon application of heat (greater than 180 °F), the resin system will readily coalesce to a smooth film.

Figure 1 / Effect of Dilution on Viscosity<sup>1</sup>



<sup>1</sup> Data collected on Brookfield RVT viscometer after 10 revolutions 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, please contact customer service:

[www.hexion.com/Contacts/](http://www.hexion.com/Contacts/)

For literature and technical assistance, visit our website at [www.hexion.com](http://www.hexion.com)