

Technical Data Sheet

EPI-REZ™ Resin 3546-WH-53

Product Description

EPI-REZ™ Resin 3546-WH-53 is a 53 percent solids dispersion of EPON™ Resin 1007 in water and methoxy propanol (PM). This product is a nonionic resin dispersion. It is designed for use in formulating coatings, sizings, adhesives, binders and fiber finishes. When EPI-REZ Resin 3546-WH-53 is crosslinked with an appropriate resole, melamine, UF resin, dicyanamide or other curative, thermoset finishes are obtained that offer performance comparable to solvent-borne epoxy finishes. This resin dispersion may also be used to formulate non-HAPS industrial ambient cure coatings in conjunction with waterborne EPIKURE™ amine curing agents.

Application Areas/Suggested Uses

- Clear bake coil coatings
- Pigmented bake and ambient cure industrial coatings
- Modifier for other waterborne resins to improve hardness, mar resistance and flexibility and shorten lacquer dry times
- Sizes or treatments for organic and inorganic fibers
- Binders for paper and filter media products

Benefits

- Good adhesion to metal and glass
- Compatible with a variety of phenolic and aminoplast resins
- Physically stable, nonionically dispersed, high molecular weight epoxy resin
- Low VOC and non-HAPS

Sales Specifications

Property	Value	Unit	Test Method
Particle Size	0.5 - 2	µm	SRC 00033
pH	7 - 10		ASTME70
Solids	52 - 54	%	ASTMD1259
Viscosity	1000 - 15000	cP	ASTMD2196
Weight per Epoxide	1900 - 2200	g/eq	ASTMD1652

Typical Properties

Property	Value	Unit
Density	9.1	lbs/gal
VOC	13	%

General Information

EPI-REZ Resin 3546-WH-53 may be formulated into gloss enamels, primers or clear coatings. EPI-REZ Resin 3546-WH-53 may also be used to modify 1-type epoxy resin dispersions, e.g. EPI-REZ Resin 3520-WY-55 and EPI-REZ Resin 6520-WH-53 to shorten the dry time, improve hardness development and increase the cured film flexibility. In order to obtain adequate cure of baked films containing EPI-REZ Resin 3546-WH-53 cured with resoles, melamines or UF resins, it is necessary to use an acid catalyst. The phenol/butyl acid phosphate catalyst Albrite PA-75 from Rhodia may be used at 0.5 to 1.5% to obtain good cure coatings with relatively good shelf stability of the formulated paint.

EPI-REZ Resin 3546-WH-53

<https://www.hexion.com/en-US/product/epi-rez-resin-3546-wh-53>

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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

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