



Technical Data Sheet

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EPONOL™ Resin 53-BH-35

Product Description

EPONOL™ Resin 53-BH-35 is an ultra high molecular weight epoxy resin cut to 35% weight in a blend of solvents. This blend is methyl ethyl ketone (MEK) and propylene glycol methyl ether (PGME) in a ratio of 75/25 by weight. The resin is derived from Bisphenol-A and Epichlorohydrin. EPONOL Resin 53-BH-35 can be incorporated as a modifier in epoxy adhesives and electrical laminates to impart flexibility and to modify flow properties of these systems. This high molecular weight epoxy resin solution also finds application in one package preconstruction shop primers and in high performance baking finishes. In this latter application, EPONOL Resin 53-BH-35 is usually reacted with urea-formaldehyde or phenolformaldehyde resins to develop the desired film properties.

Benefits

- Easy handling solution that is readily thinned or reduced with other organic solvents • Stable, clear solution requiring no additional filtration
- The blend of MEK and PGME provides a medium to rapid evaporating solvent combination that is adaptable to flash dry preconstruction primers
- Available in tank cars, tank trucks, and in 400 pound (net weight) drums

Sales Specification

Property	Units	Value	Test Method/Standard
Viscosity at 25°C	cP	U-Z2	ASTM D1544
Color	Gardner	6	ASTM D1544
Solids	%m/m	34-37.5	ASTM D1259

Typical Properties

Property	Units	Value	Test Method/Standard
Density	lbs/gal	7.8	ASTM D1475
Vapor Pressure @ 68 °F	mm Hg	70	
Specific gravity, @ 25 °C		0.934	
Flash point, Setflash	°F	<99	ASTM D3278-78
Evaporation rate		3.8	

Solids, % volume	26.6
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Processing/How to use

Identification and Classification

Chemical Abstract Service Registry Number: EPONOL Resin 53-BH-35 is a mixture. The base components are found in the TSCA inventory and are listed as follows:

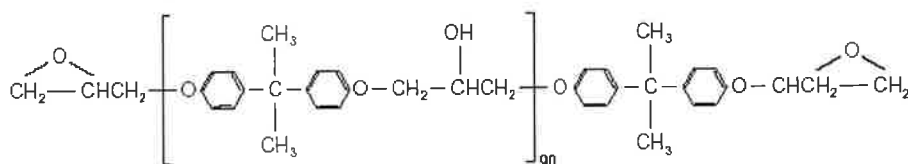
- Base resin: CAS No. 25036-25-3
- Solvents: Methyl ethyl ketone: CAS No. 78-93-3

Propylene glycol methyl ether: CAS No. 107-98-2

MSDS Number: 347

Generic Name: Ultra high molecular weight epoxy resin solution

Structural formula, base resin:



Note the repeating unit of 90 was calculated from weight average molecular weight values.

Packaging, Storage and Shipping

EPONOL Resin 53-BH-35 is a solution of an ultra high molecular weight epoxy resin that is available in tank cars, tank trucks, and 400 pound net weight closed head drums.

EPONOL Resin 53-BH-35 is a "flammable liquid" according to the Department of Transportation Regulations (Code of Federal Regulations, Title 49). A container label, easily identified by the DOT diamond displaying a flame pictograph on a red background must be prominently displayed on each drum.

Formulation and Application Information

- For phenolic and amino converted epoxy resin baking finishes, consult Hexion Specialty Chemical Technical Brochure, SC:218, entitled, "EPON™ and EPONOL Resins Converted Baking Finishes Formulated with Phenolic and Amino Resins."

- To formulate an EPONOL Resin flash dry primer, obtain formulation bulletin SC:97-76.661 entitled, "EPONOL Resin 53 Zinc-Rich Primer."

Safety, Storage & Handling

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

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

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 Material Safety Data Sheet (MSDS) 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 MSDSs 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/

For literature and technical assistance, visit our website at: www.hexion.com

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