Technical Data Sheet

EPON™ Resin 2002

Product Description

EPON™ Resin 2002 is a solid bisphenol A/epichlorohydrin epoxy resin that is designed specifically for thin-film functional and decorative epoxy powder coating applications. Some examples of these applications are appliance finishes, decorative bottle coatings, and high performance finishes for automotive parts, metal shelving, and institutional furniture.

EPON Resin 2002 provides extended gelation time in epoxy powder coatings; however, it affords rapid cure speeds when combined with accelerated dicyandiamide curing agents. The resin's low melt viscosity at baking temperatures provides outstanding flow characteristics and yields high gloss coatings.

For those powder coating applications requiring ultra-high flow characteristics, product can be selected from the lower range of the EPON Resin 2002 sales specifications. Please contact your Hexion Sales Representative for assistance.

Formulation and Application Information

For powder coating applications consult Technical Brochure SC:586 entitled, "Formulating Powder Coatings with EPON Resins."

Benefits

- Provides controlled and extended gelation time in epoxy powder coatings to maximize flow and leveling.
- Supplied in very large lots (greater than 100M pounds) with extremely uniform properties.
- Exhibits superior color stability on over bake.
- Filtered in the resin finishing operations of the manufacturing process to remove particulate contaminants.
- Packaged in 50-pound net weight moisture barrier bags.

Sales Specifications

Property	Value	Unit	Test Method
Color	100	Pt-Co	ASTM D1209
Viscosity at 25°C	10 - 17	cP	ASTM D445
Weight per Epoxide	675 - 760	g/eq	ASTM D1652

Typical Properties

Property	Value	Unit	Test Method
Bulk Density	36 - 40	lbs/ft³	
Density[1]	1.18	g/mL	
Melt Viscosity at 150°C	20 - 40	P	ASTM D2196

[1] Density of Powder Coating Material, The Powder Coating Institute, Recommended Procedure #4.

Processing/How to use

Identification and Classification

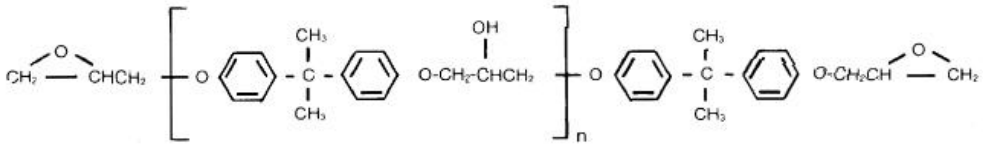
Chemical Abstract Service Registry Number: 25036-25-3 (EPA inventory designation)

Shell Material Safety Data Sheet Number: 172

Chemical Designations:

- 2,2-bis (p-glycidyloxyphenyl) propane condensation product with 2,2-bis (p-hydroxyphenyl) propane and similar isomers.
- Diglycidyl ether of bisphenol A condensation products with bisphenol A and other related materials.

Structural formula base resin:



Where n = an average of 3.5-4.0

FDA Status

Paragraph 175.300 in Title 21 of the Code of Federal Regulations permits and regulates the use of epoxy resins such as cured EPON Resin 2002 as indirect food additives in food contact applications.

Curing agents and catalysts for EPON Resin coating systems are also regulated under several sections of Title 21, for example 175.300 and 177.2280, and are subject to the limitations imposed by these sections and the general requirements of good manufacturing practices. Consult these sections for specific examples.

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, Storage and Shipping

EPON Resin 2002 is a stable material produced in a free flowing particulate form and packaged in a 50-pound net bag specifically designed and sealed to prevent moisture pickup. This product is not prone to sintering or “blocking”; however, it should be stored in an area where the temperature does not exceed 85 °F and where it is protected against moisture.

EPON Resin 2002 is not a hazardous material according to Department of Transportation regulations (Code of Federal Regulations, Title 49).

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 atwww.hexion.com