

Technical Data Sheet

EPON™ Resin 2004

Product Description

EPON™ Resin 2004 is a solid bisphenol-A/epichlorohydrin epoxy resin designed for both thick film functional and thin film decorative powder coatings. It is recommended for use in pipe coatings, appliance finishes, electrical insulation on motors and stators and in decorative films which must be tough and durable.

Benefits

- Uniform properties from lot to lot
- Filtered to remove particulate contaminants
- Low in color
- Low in moisture and total volatiles content
- Packed in foil-lined bags to maintain purity
- Stable on storage
- Flows evenly and cures rapidly at elevated temperatures
- Gives consistent cure response with a wide variety of curing agents

Sales Specifications

Property	Value	Unit	Test Method
Color	100 max		ASTM D1209
Viscosity at 25°C	18 - 27	cP	ASTM D445
Weight per Epoxide	875 - 975		ASTM D1652

Typical Properties

Property	Value	Unit	Test Method
Bulk Density	36 - 42	lb/ft ³	
Density	1.18	g/cm ³	
Melt Viscosity at 150°C	70 - 110		ICI melt Viscometer
Physical Form	Flakes or Pastilles		

EPON Resin 2004
<https://www.hexion.com/en-US/product/epon-resin-2004>

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Processing/How to use

General Information

Powder coatings formulated using EPON Resin 2004 give all of the benefits traditionally associated with epoxy coatings. They provide tough and durable films which have excellent adhesion to most substrates, are highly impact resistant and protect against chemical attack.

The physical properties of EPON Resin 2004 make it a preferred resin for powdered pipe coatings. Such coatings resist sintering and cobwebbing during application to heated pipe, yet they flow out smoothly and cure rapidly with amine and substituted amine curing agents. High film integrity develops quickly which aids in production and handling of coated pipe.

EPON Resin 2004 can also be used in thin film decorative powder coatings when a tough, yet attractive surface is desired. The low concentration of particulates and low moisture content of the resin aid in obtaining a smooth coating free of surface defects.

EPON Resin 2004 is also an excellent resin for solventborne coatings where the absence of surface defects is important. Use of this low particulate content resin can lead to less stringent filtering requirements of the coating formulation.

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 2004 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, 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.

EPON Resin 2004 is a stable material produced in flake form and packaged in 50 lb. bags with a foil, moisture barrier lining. The product requires no special storage or shipping provisions other than to protect from moisture.

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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