

Technical Data Sheet

EPON™ Resin 1009F

Product Description

EPON™ Resin 1009F is a very high molecular weight solid epoxy resin derived from a liquid epoxy resin and bisphenol-A. This resin is used extensively as a vehicle or binder in high performance industrial baking type surface coatings. In these coatings the EPON Resin 1009F is usually combined with urea-formaldehyde or phenol-formaldehyde resins to achieve the desired film properties. Coatings of this type exhibit outstanding flexibility and adhesion plus exceptional resistance to chemicals and solvents. Some typical applications of EPON Resin 1009F/urea-formaldehyde or phenol-formaldehyde coatings include linings for metal containers, appliance primers, metal furniture finishes and wire coatings. This resin also finds application in powder coatings.

Benefits

- If desired, EPON Resin 1009F can be supplied in very large lots (greater than 100M pounds) with uniform properties.
- This resin is extremely clean. It is substantially free from extraneous materials, especially for a high molecular weight polymer of this type.
- EPON Resin 1009F exhibits extremely low color for a resin of this molecular weight.

Sales Specifications

Property	Value	Unit	Test Method
Color	200	Pt-Co	ASTMD1209
Viscosity at 25°C	100 - 250	cP	ASTMD445
Weight per Epoxide	2300 - 3800	g/eq	ASTMD1652

Typical Properties

Property	Value	Unit	Test Method
Bulk Density	36 - 40	lbs/ft ³	
Esterification Equivalent Weight ¹	220		
Flash Point Setflash	>200	°F	ASTMD3278
Hydroxyl Content	0.32 - 0.34		
Melting Point	130 - 140	°C	ASTMD-3461
Sodium Content ²	2	ppm	
Weight per Gallon at 20°C	10.3	lbs	

¹ Grams of resin required to esterify completely one gram-equivalent of monobasic acid, e.g., 280 grams of C18 fatty acid or 60 grams of acetic acid

² Plant Method HC-692A Determination of Sodium in EPON Resins - MIBK Solutions (Extraction-Ion Selective Electrode Method)

Processing/How to use

Identification and Classification

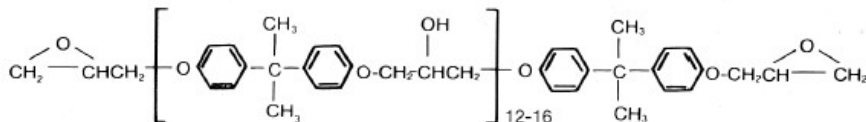
Chemical Abstract Service Registry Number: 25036-25-3 (EPA/TSCA inventory designation)

MSDS Number: 187

Chemical Designations:

- 2,2-bis(p-glycidyloxyphenyl) propane condensation product with 2,2-bis(p-hydroxyphenyl) propane and similar isomers.
- Phenol, 4,4'-(1-methylethylidene)bis-, polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bis(oxirane) .

Structural formula, base resin:



Packaging, Storage and Shipping

- EPON Resin 1009F is a stable material produced in flake form and packaged in a 50-pound net three ply natural kraft paper bag. The product is not prone to sintering or "blocking". It should be stored in a covered area protected against moisture.
- EPON Resin 1009F is also available in flexible intermediate bulk containers (FIBCs) holding 2000 pounds net of solid resin. The weighing accuracy of a 2000-pound container is +/-0.5 percent.
- EPON Resin 1009F is not a hazardous material according to the Department of Transportation regulations (Code of Federal Regulations, Title 49).

FDA Status

For further information on the FDA status of our products, please refer to our Application Bulletin - FDA Information Indirect Food Contact Applications.

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