

Technical Data Sheet

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EPON™ Resin 872

Product Description

EPON™ Resin 872 is a chemically modified BPA based epoxy resin that is semi-solid at room temperature. Systems using EPON Resin 872 can be formulated with other EPON Resins, HELOXY™ Modifiers, or used as the sole resin to provide varying degrees of flexibility and toughness. EPON Resin 872 can be used with all curing agents. EPON Resin 872 provides cured resin toughness and flexibility in comparison to liquid grade BPA epoxies, but reduces elevated temperature performance. EPON Resin 872 is especially useful in applications requiring extra resistance to thermal shock or impacts.

Benefits

- May be blended with other epoxy resins.
- Semi-solid at room temperature, pourable at mildly elevated temperatures.
- May be used to produce potting and encapsulants of high thermal shock resistance.
- Improved toughness and flexibility over unmodified liquid epoxies.

Sales Specification

Property	Units	Value	Test Method/Standard
Weight per Epoxide	g/eq	625 – 725	ASTM D1652
Viscosity at 25°C ¹	P	15 – 38	ASTM D445
Color ¹	Gardner	10 max.	ASTM D1544

¹ 75% solution in xylene

Typical Properties

Property	Units	Value	Test Method/Standard
Density at 25°C	lb/gal	9.0	ASTM D1475

Processing/How to use

General Information

A wide variety of curing agents can be used with EPON Resin 872, including aliphatic amines, amido

amines, amine adducts, polyamides, and cyclo-aliphatic amines. EPON Resin 872 is amenable to formulation of coatings, pottings, and encapsulants due to its inherent toughness and flexibility. Other uses include tooling, dies, and adhesives.

With mild heating, EPON Resin 872 can be handled like liquid BPA epoxies. Generally temperatures of 160° to 180 °F are adequate to ease dispensing and mixing. After mixing, many formulations may be at usable viscosities at slightly above room temperature, since many curing agents and additives will lower system viscosity.

In coating applications, EPON Resin 872 may be initially incompatible with the curing agent used. As the chemical reaction between the two proceeds, compatibility develops. Using the system too soon after mixing can result in “blushing” or other film defects. Blushing can often be prevented by using an induction period to allow compatibility to develop before applying the coating. Required induction periods will differ with each resin system.

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, call our toll-free customer service number at: 1-877-859-2800

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

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