

Technical Data Sheet

EPON™ Resin 834

Product Description

EPON™ Resin 834 is a BPA based epoxy resin that is semi-solid at room temperature. Systems using EPON Resin 834 can be formulated to be useful in a variety of high solids and tar modified coatings, high toughness adhesives, laminating, and prepreg molding materials. Because of its higher molecular weight, EPON Resin 834 provides enhanced system reactivity, surface tack and cured resin toughness in comparison to liquid grade BPA epoxies, but reduces elevated temperature performance. EPON Resin 834 is especially useful in applications requiring extra surface tack, cure speed or toughness but cannot tolerate additives or modifiers.

Benefits

- May be blended with other epoxy resins.
- Semi-solid at room temperature, pourable at slightly elevated temperatures.
- May be used to produce 10 to 15 mil films with high adhesion.
- Improved toughness, tack and cure speed over unmodified liquid epoxies

Sales Specifications

| Property | Value | Unit | Test Method |
|--------------------|-----------|------|-------------|
| Color | 200 max | | ASTMD1209 |
| Viscosity at 25°C | 2.1 - 2.4 | cP | ASTMD445 |
| Weight per Epoxide | 235 - 263 | g/eq | ASTMD1652 |

¹ 40% solution in methyl ethyl ketone

Typical Properties

| Property | Value | Unit | Test Method |
|-----------------|-------|--------|-------------|
| Density at 25°C | 9.7 | lb/gal | ASTMD1475 |

Processing/How to use

General Information

A wide variety of curing agents can be used with EPON Resin 834, including aliphatic amines, amidoamines, amine adducts, polyamides, and cycloaliphatic amines. EPON Resin 834 is amenable to formulation of high solids coatings, adhesives, and prepregs due to its moderate molecular weight, film forming ability, and inherent toughness. It is especially useful as a base resin in adhesives, sealants, potting and encapsulation. With gentle heating, EPON Resin 834 can be handled like liquid BPA epoxies. Generally temperatures of 140° to 160 °F are adequate to ease dispensing and mixing. After mixing, many formulations may be at usable viscosities at room temperature, since many curing agents and additives will lower system viscosities. In coating applications, EPON Resin 834 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

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<https://www.hexion.com/en-US/product/epon-resin-834>

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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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