

ERISYS® RDGE Resorcinol Diglycidyl Ether Low Viscosity Aromatic Difunctional Epoxy Resin

Product Description

ERISYS® RDGE resin, epoxidized resorcinol, is a very low-viscosity aromatic diepoxide. When properly formulated, ERISYS® RDGE resin can be used as the sole resin in an epoxy formulation. Its primary use, however, is as a reactive modifier. All epoxy resin curing agents are compatible with ERISYS® RDGE and RDGE/epoxy resin blends. As a result of the product's high reactivity, formulators have increased latitude in curing agent selection.

Epoxy formulations modified with ERISYS® RDGE resin exhibit viscosity reduction, significantly faster cures and high cross-link densities. Higher cross-link density produces higher strengths, better heat and chemical resistance than formulations modified with other reactive diluents. Property modification is concentration dependent. See the following table and graphs for an indication of the magnitude of the changes that can be expected.

Applications

- Conductive adhesives
- Prepregs and composites
- Chemical-resistant coatings
- Viscosity modifier for epoxy novolacs

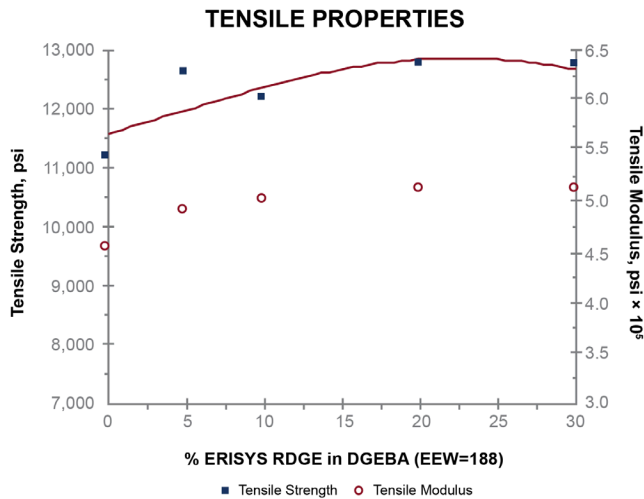
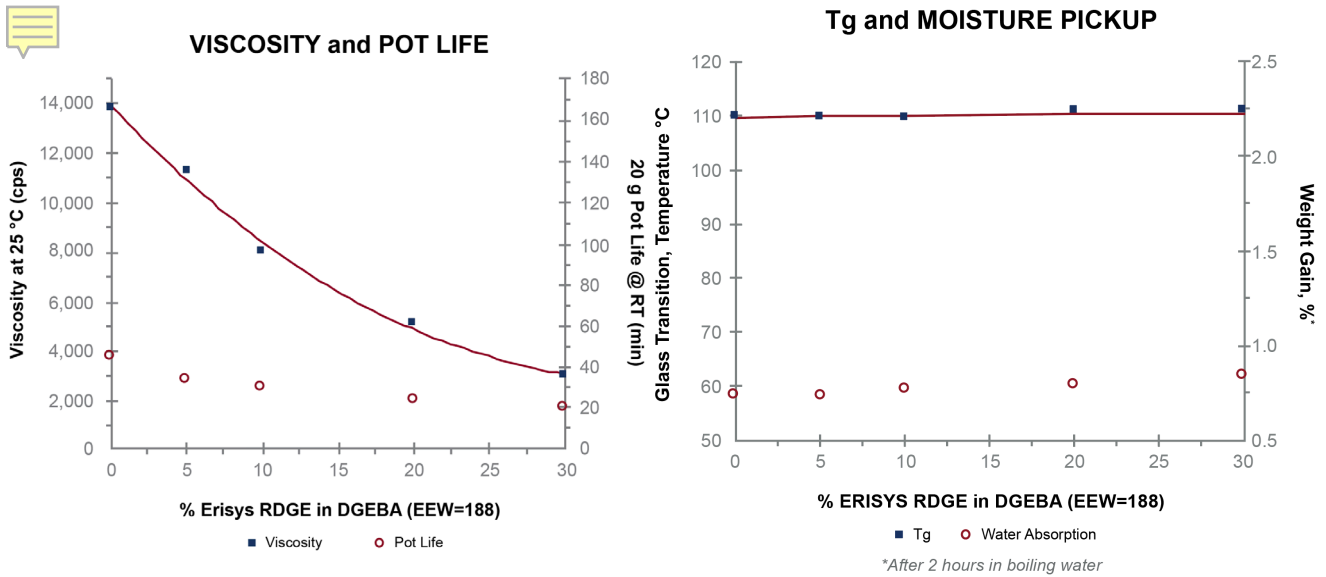
Typical Properties

Property	ERISYS RDGE
Appearance	Clear, Clean
Viscosity at 25°C, cP	300 – 500
Epoxide Equivalent Weight, g/eq	118 – 125
Gardner Color, max	2
Residual Epichlorohydrin, max ppm	10
Hydrolyzable Chloride, max %	0.10
Weight per Gallon at 25°C, lb.	10.0 ± 0.1
Flash Point, COC, °C (°F)	177 (350)

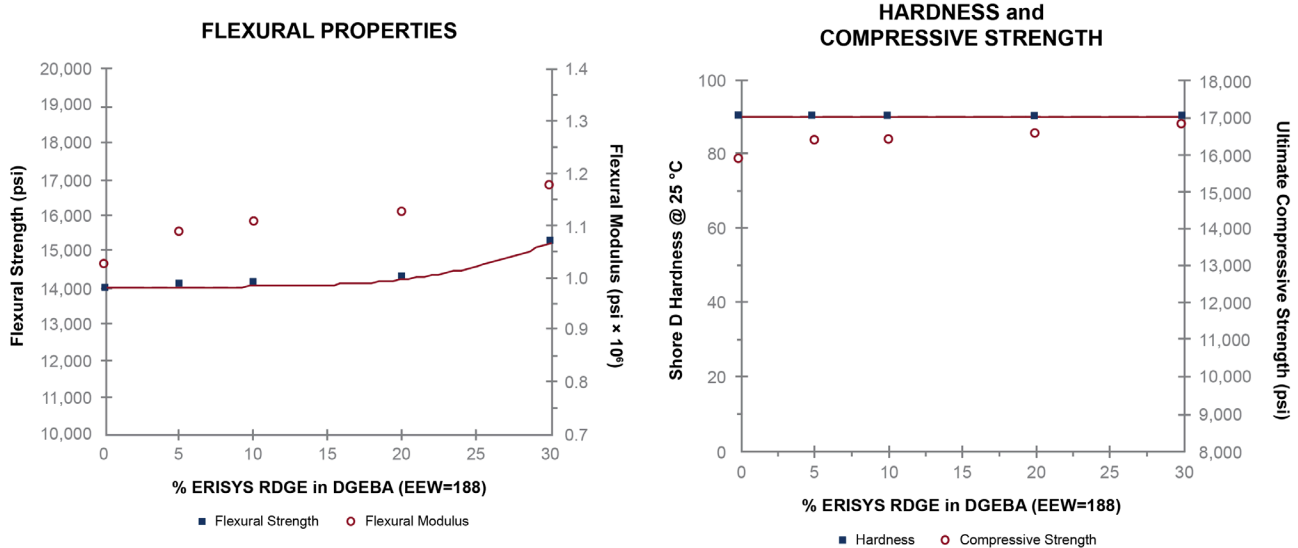
Formulation Properties

The use of ERISYS[®] RDGE resin will affect the handling and cured properties of resin formulations. The effects of these changes are shown below.

The effect of ERISYS[®] RDGE resin on the cured properties of liquid epoxy resin (EEW 188) cured with TETA.



The effect of ERISYS RDGE resin on the cured properties of liquid epoxy resin (EEW 188) cured with TETA, cont.



Storage

ERISYS[®] RDGE resin should be stored in a dry place, in the sealed original containers, at temperatures between **+2°C and +40°C (+35.6°F and +104°F)**. Under these storage conditions, the product has a shelf life of **24 months** (from date of manufacture). The products should not be exposed to direct sunlight.

Due to the purity of ERISYS[®] RDGE resin, crystallization of this resin can occur. The crystallized resin can be liquified without damage to the resin by opening the drum bung and heating to a temperature of 50°C to 60°C. Re-liquified resin should be mixed before sampling or partial use of drum. ERISYS[®] RDGE can be stored at 50°C to prevent recrystallization; however, it is not recommended to store at 50°C for more than two weeks.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest SDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

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