

## **TECHNICAL BULLETIN**

# An Emerald Performance Materials Company

### **ERISYS<sup>®</sup> GE-25** 1,6 Hexanediol Diglycidyl Ether Aliphatic Difunctional Epoxy Reactive Diluent

#### DESCRIPTION

ERISYS GE-25, epoxidized 1,6-Hexanediol, is a low viscosity, aliphatic, diepoxide. It is intended for use as a reactive diluent for high viscosity epoxy resins. GE-25 is compatible at all concentrations with those resins and resin/diluent blends can be cured using any epoxy resin curing agent.

As a result of its chemical structure, GE-25 is not as efficient in viscosity reduction as the aliphatic mono-functional reactive diluents ERISYS GE-5, GE-6, GE-7, and GE-8. However, the performance properties of epoxy formulations diluted with GE-25 are compromised to a lesser degree than those of systems containing the aliphatic monofunctional diluents. Depending on concentration, properties such as gel time, strength, and modulus of a GE-25 diluted formulation remain relatively unchanged compared to an undiluted resin. The difunctionality of GE-25 helps to produce formulations with improved chemical and heat resistance compared to formulations containing monofunctional diluents.

Formulations containing GE-25 exhibit excellent wettability making them ideal candidates for composite and impregnation applications. GE-25 has low moisture, hydrolyzable chloride and residual epichlorohydrin contents. Its exceptionally low color makes GE-25 the diluent of choice in color critical applications.

#### TYPICAL PROPERTIES

Appearance	Clear, Clean
Viscosity @ 25°C, cps	15 –23
Epoxide Equivalent Weight, g/eq	143 – 156
APHA Color, max	100
Residual Epichlorohydrin, max ppm	0.1
Hydrolyzable Chloride, max %	0.1
Water Content, max %	0.1
Solvent Content, max %	0.1
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#### **APPLICATIONS**

- □ Filament Winding
- Concrete/Civil Engineering Adhesives
- Laminating/Assembly Adhesives
- □ Structural Adhesives
- □ Vacuum Pressure Impregnation (VPI)
- Electronic Encapsulants
- □ Flooring

#### **HEALTH & SAFETY PRECAUTIONS**

ERISYS GE-25 is not a primary skin irritant and sensitizer. However, as with any epoxy material, irritation can result from repeated or prolonged contact. The symptoms of this irritation may appear as a mild reddening or a more pronounced rash. It is, therefore, important to avoid skin contact where possible. Rubber gloves, full eye protection, and protective clothing are recommended.

Refer to the **CVC Thermoset Specialties** Material Safety Data Sheet on ERISYS GE-25 for additional safety & handling information. The MSDS is revised as new data becomes available.

#### PACKAGING & AVAILABILITY

ERISYS GE-25 is available in 55-gallon steel non-returnable drums (480 lbs. net) and 5 gallon plastic pails (45 lbs. net). Bulk deliveries are available on special request.



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ERISY<sup>®</sup> GE-25

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