

Technical Data Sheet

HELOXY™ Modifier 67

Product Description

HELOXY™ Modifier 67 is a commercial grade, diglycidyl ether of 1,4-butanediol and is primarily used as a reactive diluent or viscosity reducer for all classes of epoxy resins.

Application Areas/Suggested Uses

- To improve air release and wetting characteristics in electrical, potting, encapsulation, and impregnation applications
- To maintain high reactivity yet provide workable viscosity at room temperature when using novolac or other high functionality epoxy resins
- As a thermosetting resin in textile and paper applications

Benefits

- Reduces viscosity while maintaining most cured state properties
- Improves wetting characteristics
- Facilitates air release
- Provides solubility in ethanol/water solutions

Sales Specifications

Property	Value	Unit	Test Method	Standard
Color	1	Gardner	ASTMD1544	
Viscosity at 25°C	10 - 20	mPa s ¹		ISO 12058-1
Weight per Epoxide	124 - 137	g/eq	ASTMD1652	

¹ Höppler Falling Ball (1 mPa*s = 1 cP)

Typical Properties

Property	Value	Unit	Test Method
Density	9.1 - 9.3	lbs/gal	ASTMD1475

General Information

HELOXY 67 is compatible with bisphenol based epoxy resins, peroxidized olefins, and higher functionality epoxy resins. Concentrations of up to 40 percent of HELOXY 67 have been employed for viscosity reduction. Performance properties of systems containing this resin are maintained at higher modification concentrations than is possible with monoepoxide diluents.

Effect of HELOXY 67 modifications on the properties of various EPON™ Resin 828 based systems is demonstrated by data presented in Table 1. Substituting HELOXY 67 for Epon 828 or other unmodified resins generally results in slight increases in flexibility. As with all diluting modifiers, use of HELOXY 67 decreases chemical resistance and elevated temperature performance.

To minimize such losses, the lowest concentration of HELOXY 67 necessary to obtain desired reduction in viscosity should be used. The viscosity reduction efficiency of HELOXY 67 when blended with Epon 828 is compared to that of other HELOXY modifiers by data illustrated in Figure 1.

When formulating with HELOXY 67, the concentration of curing agent to be used will likely be different than in the case of an unmodified system. The proper curing agent combining ratio should always be calculated in order to ensure proper stoichiometric balance.

Figure 1 / Viscosity Dilution Effectiveness of HELOXY Modifiers

HELOXY Modifier 67

<https://hexioninternet-hexioninternet-slave.azurewebsites.net/en-US/product/helox-modifier-67>

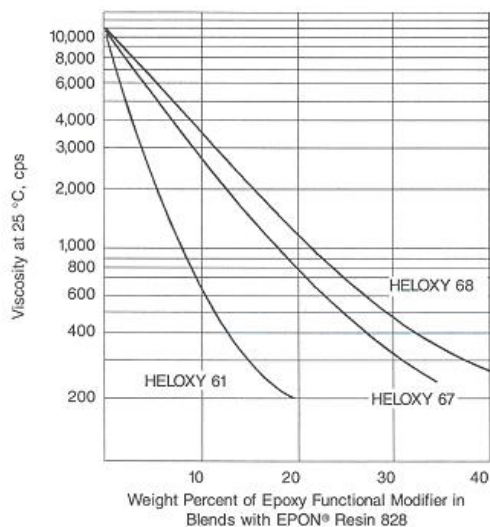
Generated: July 1, 2022

Issue Date:

Revision: 9/1/2007 12:00:00 AM

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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.

Some epoxy materials can crystallize during storage. The tendency to do so is affected by storage conditions, composition, and other factors. Should crystallization occur, it may be converted to liquid by opening the drum bung and gently warming to temperatures not to exceed 50 °C (122 °F).

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