# **Advanced Materials Technical Datasheet**



## PHENOXY LER-HB Resin

#### **Product Description**

PHENOXY LER-HB is a 100% NV liquid Bisphenol A type epoxy resin having a 10% modification with low molecular weight PHENOXY PK™HB. Phenoxy (polyhydroxyether) resins are tough and ductile thermoplastic amorphous polymers having excellent thermal stability, as well as cohesive and adhesive strength. PHENOXY LER-HB combines the reactivity of a standard liquid epoxy resin and the toughening of phenoxy resin in one package for use in formulating composites, coatings, inks, and adhesives. PHENOXY LER-HB can be further modified with liquid epoxy resins to provide for lower levels of contained phenoxy resin. Reactive diluents such as glycidyl ethers, and solvents such as benzyl alcohol and propylene carbonate, as well as other epoxy modifying agents can also be added to PHENOXY LER-HB. Single-package epoxy formulations containing PHENOXY LER-HB and latent hardeners such as dicyandiamide will yield improved toughness and adhesive strength when properly cured on many substrates including steel, aluminum, glass and carbon fibers, and plastics such as nylon and polyester (PET).

### **Applications**

- Latent Cure Adhesives and Sealants
- Two Component Epoxy Coatings
- Inks
- Epoxy Based Composites
- Epoxy Based Pre-pregs

## **Specified Key Properties**

Property	Value
Color*, Gardner, max	2
Solids, %	100
Viscosity* (Brookfield) at 40 °C, cP	20,000-50,000
Epoxy Equivalent Weight (g/equivalent)	202-214

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## **Regulatory Status**

TSCA (USA), DSL (Canada), PICCS (Philippines), AICS (Australia), ENCS/MITI (Japan), IECSC (China). Phenoxy LER-HB is not polymer exempt in Europe.

### **Storage**

PHENOXY LER-HB should be stored in a dry place, in its sealed original container, at temperatures between 0°C - 40°C (32°F - 104°F). Under these storage conditions the product has a shelf life of 12 months from date of manufacture. The product should not be exposed to direct sunlight.

Phenoxy resins may absorb water, ~1% by weight, if exposed for long periods of time to the atmosphere. Pellets can be dried at 80 - 90 °C if desired.

## **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 MSDS 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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