

## Advanced Materials

# EPALLOY® 5000<sup>#</sup>

### Hydrogenated Bisphenol-A Epoxy Resin H-BADGE

#### DATA SHEET

EPALLOY® 5000 resin is the di-epoxide of the cycloaliphatic alcohol hydrogenated bisphenol A. Due to its saturated ring structure, this resin is expected to find utility in applications requiring resistance to ultraviolet light exposure. Formulations based on standard DGEBA resins usually do not perform well in this environment. Curing agent selection should be done with great care to achieve optimum weathering resistance with EPALLOY® 5000 resin. Products with improved chalking resistance and gloss retention can be formulated.

#### Applications

- Tanks
- Concrete dikes
- Steel structures
- Rail cars
- Stereolithography 3D printing
- UV cure adhesives and coatings

#### Properties

EPALLOY® 5000 resin exhibits a significantly lower viscosity than DGEBA. Higher filler loadings can, therefore, be achieved, resulting in cost reduction and reduced shrinkage. The adhesion and chemical resistance characteristics of EPALLOY® 5000 resin formulations are expected to be similar to those of standard DGEBA systems.

#### Key data

##### Specified key data

Appearance (visual)	clear	
Epoxy equivalent (Titration)	210 - 230	[g/eq]
Viscosity at 25 °C (Brookfield)	1300 - 2500	[mPa s]

Specified key data are individually checked throughout and guaranteed.

##### Typical key data

Medium epoxy equivalent (ISO 3001)	220	[g/eq]
Residual Epichlorohydrin, max	≤ 10	[ppm]
Hydrolyzable Chloride, max	0.2	[%]
Flash point	≥ 115	[°C]
APHA Color, max	100	

<sup>#</sup> In addition to the brand name product denomination may show different appendices, which allows us to differentiate between our production sites: e.g. BD = Germany, US = United States, IN = India, CI = China, etc. These appendices are in use on packaging, transport and invoicing documents. Generally, the same specifications apply for all versions. Please address any additional need for clarification to the appropriate Huntsman contact.

As-supplied form	liquid
Odour	slight
Shelf life (at storage temperature between 2 - 40 °C) (see expiry date on original container)	3 years
Hazardous decomposition products (when disposed of in fire)	carbon monoxide, carbon dioxide and other toxic gases and vapours
Disposal	regular procedures approved by local authorities
Typical key data are spot checked; the values are typical for the product and are indicated for information only. The values are not guaranteed.	

<b>Storage</b>	EPALLOY® 5000 should be stored in a dry place, preferably in the sealed original container, at temperatures between 2 and 40 °C. The product should not be stored exposed to direct sunlight.
<b>Handling precautions</b>	Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For additional information please consult the corresponding product safety data sheets and the brochure "Hygienic precautions for handling plastics products".

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