Araldite® DY-K Diluent

Product Description

Araldite® DY-K Diluent is a cresyl glycidyl ether (CGE). Liquid epoxy resins, based on bisphenol A and epichlorohydrin, are sometimes too viscous for use in certain applications. The viscosity of liquid resins can be reduced by the addition of solvents, plasticizers or reactive diluents. When formulating thick coatings, the incorporation of solvents is not recommended, since it is impossible to drive them off completely. Plasticizers cannot be tolerated in many electrical applications or where heat resistance properties are required. Reactive diluents are free-flowing compounds of low molecular weight (130 - 210) that take part in the curing reaction and considerably decrease the viscosity of an epoxy resin system. Although the addition of reactive diluents will always have some influence on the end properties of the cured resin/hardener system, they represent the best choice of viscosity reduction. Araldite® DY-K is less volatile and shows good resistance to water. Araldite® DY-K can be added to epoxy resins in quantities of 2-20% by weight. Additions of more than 20% cause considerable deterioration of the properties of the cured system. The chemical structure is shown below.

![Chemical Structure](image)

Applications

- Casting
- Coatings
- Filament winding
- Floorings
- Laminating and Tooling

Features

- Good flow
- Good wetting
- Low surface tension
- Good leveling
Typical Properties*

<table>
<thead>
<tr>
<th>Property</th>
<th>Araldite® DY-K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, no contamination</td>
</tr>
<tr>
<td>Color, Gardner, max</td>
<td>1</td>
</tr>
<tr>
<td>Epoxy value, eq/kg</td>
<td>5.2 - 5.7</td>
</tr>
<tr>
<td>Epoxy equivalent, g/eq</td>
<td>175 - 190</td>
</tr>
<tr>
<td>Viscosity at 25°C, cP</td>
<td>6 - 12</td>
</tr>
<tr>
<td>Density at 25°C, g/cm³</td>
<td>1.08</td>
</tr>
<tr>
<td>Flash point, closed cup, °C</td>
<td>116</td>
</tr>
</tbody>
</table>

*Properties are based on Huntsman test methods. Copies are available upon request

Figure 1. Viscosity reduction effects of various Huntsman reactive diluents used with Araldite GY 6010®
Storage

Araldite® DY-K Diluent should be stored in a dry place, in the original sealed containers, at temperatures between 2°C and 40°C (36°F and 104°F). Under these storage conditions, the product has a shelf life of 3 years (from date of manufacture). The product should not be exposed to direct sunlight.

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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