

Advanced Materials

Araldite® DY-E

Specialty components

DATA SHEET

Monofunctional, aliphatic, reactive diluent for epoxy resins

Applications	<p>Can be mixed with unmodified bisphenol-A or bisphenol-A/F epoxy resins to formulate low-viscosity epoxy resins for solvent-free coatings, flooring screeds and mastics.</p> <p>A further advantage of this diluent is its low hazard potential in terms of industrial hygiene; it is better than any other reactive diluent in this respect.</p>																																												
Properties	<p>Reactive diluents have low viscosity owing to their low molecular weight. Their vapour pressure is higher and their physiological effectiveness greater than that of unmodified epoxy resins.</p> <p>The use of Araldite DY-E in surface technologies has the following effects, according to the amount included:</p> <ul style="list-style-type: none"> • a very clear reduction in viscosity and reactivity • uniformly good film surface quality (partly dependent on the hardener) • a clear improvement in processability • a moderate to good increase in flexibility • a reduction in resistance to hot water and to chemicals. 																																												
Key data	<p>Specified key data</p> <table border="1"> <thead> <tr> <th>Aspect (visual)</th> <th colspan="2">clear liquid</th> </tr> </thead> <tbody> <tr> <td>Colour (Gardner, ISO 4630)</td> <td colspan="2">≤ 2</td> </tr> <tr> <td>Epoxy index (ISO 3001)</td> <td>3.15 - 3.60</td> <td>[Eq/kg]</td> </tr> <tr> <td>Epoxy equivalent (ISO 3001)</td> <td>278 - 317</td> <td>[g/Eq]</td> </tr> <tr> <td>Viscosity at 25 °C (Rotary viscosity, ISO 3219)</td> <td>4 - 12</td> <td>[mPa s]</td> </tr> </tbody> </table> <p>Specified key data are individually checked throughout and guaranteed.</p> <p>Typical key data</p> <table border="1"> <tbody> <tr> <td>Medium epoxy equivalent composition (ISO 3001)</td> <td>298</td> <td>[g/Eq]</td> </tr> <tr> <td>Vapour pressure at 20 °C (balance)</td> <td>0.013</td> <td>[Pa]</td> </tr> <tr> <td>Density at 20 °C (ISO 1675)</td> <td>0.89</td> <td>[g/cm³]</td> </tr> <tr> <td>Flash point (Pensky Martens, ISO 2719)</td> <td>~ 155</td> <td>[°C]</td> </tr> <tr> <td>As-supplied form</td> <td colspan="2">liquid</td> </tr> <tr> <td>Odour</td> <td colspan="2">slight</td> </tr> <tr> <td>Shelf life (at storage temperature between 2 - 40 °C) (see expiry date on original container)</td> <td colspan="2">several years</td> </tr> <tr> <td>Hazardous decomposition products (when disposed of in fire)</td> <td colspan="2">carbon monoxide, carbon dioxide, nitrogen oxides and other toxic gases and vapours</td> </tr> <tr> <td>Disposal</td> <td colspan="2">regular procedures approved by local authorities</td> </tr> </tbody> </table> <p>Typical key data are spot checked; the values are typical for the product and are indicated for information only. The values are not guaranteed.</p>			Aspect (visual)	clear liquid		Colour (Gardner, ISO 4630)	≤ 2		Epoxy index (ISO 3001)	3.15 - 3.60	[Eq/kg]	Epoxy equivalent (ISO 3001)	278 - 317	[g/Eq]	Viscosity at 25 °C (Rotary viscosity, ISO 3219)	4 - 12	[mPa s]	Medium epoxy equivalent composition (ISO 3001)	298	[g/Eq]	Vapour pressure at 20 °C (balance)	0.013	[Pa]	Density at 20 °C (ISO 1675)	0.89	[g/cm ³]	Flash point (Pensky Martens, ISO 2719)	~ 155	[°C]	As-supplied form	liquid		Odour	slight		Shelf life (at storage temperature between 2 - 40 °C) (see expiry date on original container)	several years		Hazardous decomposition products (when disposed of in fire)	carbon monoxide, carbon dioxide, nitrogen oxides and other toxic gases and vapours		Disposal	regular procedures approved by local authorities	
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Storage	Araldite® DY-E 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.
Handling precautions	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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