

Advanced Materials

Aradur® 125#

Solventfree and solventbased coatings, Adhesives

DATA SHEET

High-viscosity polyamidoamine hardener

Applications	In combination with liquid or (preferably) solid epoxy resins or their solutions, such as Araldite GZ 7071 X 75, Aradur 125 is suitable for the formulation of cold-curing, solvent-containing coatings, for application to steel and mineral substrates. Its main areas of application are in ship-building, corrosion protection and construction industry. When used along with liquid epoxy resins such as Araldite® GY 250, PY 720 or GY 783, highly-filled mastics and reaction adhesives can be formulated.																																									
Properties	In combination with solid epoxy resins or their solutions for cold-curing, solvent-containing coatings, presenting the following features: <ul style="list-style-type: none"> • long working times • non-tacky films after pre-reaction • very good adhesion and flexibility • very high degree of corrosion protection Reactivity increases throughout the Aradur 100, 115, 125, 140 hardeners. The degree of sensitivity to high atmospheric humidity increases in proportion with the amine content. For applications under cold-damp conditions, we recommend Aradur 422 XW 70, 423 XW 60, 424 XW 50 hardeners (pre-adducted polyamidoamine).																																									
Key data	<p>Specified key data</p> <table border="1"> <tr> <td>Aspect (visual)</td> <td colspan="2">clear liquid</td> </tr> <tr> <td>Colour (Gardner, ISO 4630)</td> <td colspan="2">≤ 10</td> </tr> <tr> <td>Amine number (ISO 9702)</td> <td>340 - 370</td> <td>[mg KOH/g]</td> </tr> <tr> <td>Viscosity at 75 °C (Rotary viscosity, ISO 3219)</td> <td>700 - 900</td> <td>[mPa s]</td> </tr> </table> <p>Specified key data are individually checked throughout and guaranteed.</p> <p>Typical key data</p> <table border="1"> <tr> <td>H⁺ active equivalent</td> <td>~ 130</td> <td>[g/eq]</td> </tr> <tr> <td>Density at 20 °C (ISO 1675)</td> <td>0.96</td> <td>[g/cm³]</td> </tr> <tr> <td>Flash point (Pensky Martens, ISO 2719)</td> <td>≥ 200</td> <td>[°C]</td> </tr> <tr> <td>Gel time (Tecam, 250 g / 23 °C, Araldite GY 250/Aradur 125, 100:65 p.b.w.)</td> <td>120</td> <td>min</td> </tr> <tr> <td>As-supplied form</td> <td colspan="2">liquid</td> </tr> <tr> <td>Odour</td> <td colspan="2">amine</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> </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)	≤ 10		Amine number (ISO 9702)	340 - 370	[mg KOH/g]	Viscosity at 75 °C (Rotary viscosity, ISO 3219)	700 - 900	[mPa s]	H ⁺ active equivalent	~ 130	[g/eq]	Density at 20 °C (ISO 1675)	0.96	[g/cm ³]	Flash point (Pensky Martens, ISO 2719)	≥ 200	[°C]	Gel time (Tecam, 250 g / 23 °C, Araldite GY 250/Aradur 125, 100:65 p.b.w.)	120	min	As-supplied form	liquid		Odour	amine		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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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.

Mix ratio	<p>The optimum mix ratio of Araldite GY 250 and Aradur 125 is 100:65 parts by weight. For increased flexibility and therefore increased bond strength in adhesives, mix ratios of 100 parts of resin to 100 parts of Aradur 125 are possible but result in clear decrease in thermal stability – further testing of formulation strongly recommended.</p> <p>The mix ratio of Araldite GZ 7071 X 75 to Aradur 125 should be selected as 100:25 parts by weight.</p> <p>Deviations from this of up to 15 % are acceptable. In such cases a higher proportion of hardener provides increased flexibility and adhesion, while improved chemical resistance is achieved with a reduced proportion of hardener.</p>
Storage	<p>Aradur® 125 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. (see current edition of MSDS for latest update on storage)</p>
Handling precautions	<p>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.</p>

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