

Advanced Materials

Aradur[®] 36[#]

CONSTRUCTION INDUSTRY SYSTEMS
SOLVENT-FREE COATINGS
WATER-BORNE COATINGS

DATA SHEET

Formulated polyamine adduct, dissolved in water

Applications	Used with liquid epoxy resins such as Araldite [®] GY 776 or the emulsion PZ 33757/67, Aradur 36 is suitable for the formulation of water-based coatings for application to mineral and metallic substrates. Particularly suitable for solvent-free dispersion coatings with a high solids content and for epoxy cement concrete.																																									
Properties	Aradur 36 contains no organic solvents. It represents an optimum solution in terms of solids content at medium viscosity. When Aradur 36 is diluted with water, turbidity may occur below a 65% solids content level. In pre-pigmented form, however, more stable hardener solutions can be produced. In combination with liquid epoxy resins, relatively slow-drying films with good flow properties, good adhesion, flexibility and a high gloss finish can be achieved. With (proportional) use of solid resin dispersions such as Araldite PZ 3961-1, drying times can be significantly shortened. Aradur 36 provides good anti-corrosion properties. The pot life of dispersion coatings formulated with Aradur 36 is typically limited to a maximum of 2.5 hours (loss of gloss finish). A clear increase in viscosity occurs later especially in heavily diluted mixtures.																																									
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">≤ 6</td> </tr> <tr> <td>Amine index (ISO 9702)</td> <td>185 - 225</td> <td>[mg KOH/g]</td> </tr> <tr> <td>Water content (ISO 760)</td> <td>19 - 21</td> <td>%</td> </tr> <tr> <td>Viscosity at 25 °C (Rotary viscosity, ISO 3219)</td> <td>4000 - 7000</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>~ 165</td> <td>[g/eq]</td> </tr> <tr> <td>Density at 20 °C (ISO 1675)</td> <td>1.04</td> <td>[g/cm³]</td> </tr> <tr> <td>Flash point (Pensky Martens, ISO 2719)</td> <td>≥ 190</td> <td>[°C]</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">3 years at least</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)	≤ 6		Amine index (ISO 9702)	185 - 225	[mg KOH/g]	Water content (ISO 760)	19 - 21	%	Viscosity at 25 °C (Rotary viscosity, ISO 3219)	4000 - 7000	[mPa s]	H ⁺ active equivalent	~ 165	[g/eq]	Density at 20 °C (ISO 1675)	1.04	[g/cm ³]	Flash point (Pensky Martens, ISO 2719)	≥ 190	[°C]	As-supplied form	liquid		Odour	Amine		Shelf life (at storage temperature between 2 - 40 °C) (see expiry date on original container)	3 years at least		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 recommended mix ratio of Araldite GY 776 and Aradur 36 is 100:88 parts by weight.</p> <p>The recommended mix ratio of Araldite PZ 33757/67 and Aradur 36 is 100:62 parts by weight.</p> <p>The recommended mix ratio of Araldite PZ 3961-1 and Aradur 36 is 100:17 parts by weight.</p> <p>Deviations from this of up to 10 % can be tolerated. In this connection, a higher proportion of hardener results in greater flexibility and better adhesion, while improved levels of anti-corrosion protection are achieved with a lower proportion of hardener.</p>
Storage	<p>Aradur 36 should be stored in a dry place, preferably in the sealed original container, at temperatures between 2 and 40°C (temperatures will never be allowed to drop under 0°C). The product should not be stored exposed to direct sunlight.</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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