

**Aradur® 21<sup>#</sup>****Low-viscosity, aliphatic polyamine**

**Applications** Liquid to semi-solid Araldite® epoxy resins or resin solutions (e.g. Araldite GY 250, GY 260 or GY 280) do not cure fully when processed solely with Aradur 21; the resulting films are brittle and tend to exudate.

If formulated, as hardener for epoxy resin mortars, floorings, mastics and solvent-free coatings (also for corrosion resistance).

**Properties** Depending on the formulation and the epoxy resin used, the surface technologies present the following features:

- good resistance to aliphatic and aromatic hydrocarbons
- very good mechanical properties following optimal cure
- good colour stability
- good resistance to aqueous neutral and alkaline solutions.

| Key data  | Specified key data |              |  |
|---|--------------------|--------------|--|
|   | Aspect (visual)    | clear liquid |  |
| Colour (Gardner, ISO 4630)                      | ≤ 1                |              |  |
| Amine number (ISO 9702)                         | 680 - 720          | [mg KOH/g]   |  |
| Viscosity at 25 °C (Rotary viscosity, ISO 3219) | ≤ 10               | [mPa s]      |  |


Specified key data are individually checked throughout and guaranteed.

| Typical key data   |   |                      |  |
|--|---|----------------------|--|
| Refractive index at 25 °C (ISO 489)  | 1.4625 - 1.4645   |                      |  |
| H <sup>+</sup> active equivalent   | 40  | [g/eq]               |  |
| Density at 25 °C (ISO 1675)  | 0.87  | [g/cm <sup>3</sup> ] |  |
| Flash point (Pensky Martens, ISO 2719)   | ≥ 102   | [°C]                 |  |
| As-supplied form   | liquid  |                      |  |
| Odour  | ammoniacal  |                      |  |
| Shelf life (at storage temperature between 2 - 40 °C)<br>(see expiry date on original container) | several years   |                      |  |
| Hazardous decomposition products<br>(when disposed of in fire)                                   | carbon monoxide, carbon dioxide<br>nitrogen oxides and other toxic<br>gases and vapours |                      |  |
| Disposal   | regular procedures<br>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.

<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.

|                             |   |
|-----------------------------|---|
| <b>Mix ratios</b>           | The optimum mix ratio for Araldite GY 250 and Aradur 21 is 100:21 parts by weight.  |
| <b>Storage</b>              | Aradur 21 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. |
| <b>Note</b>                 | Aradur® is a registered trademark of Huntsman LLC or an affiliate thereof.  |

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| <p><b>Huntsman LLC</b><br/>®Registered trademark</p>  <p><b>APPROVED TO</b><br/>ISO 9001</p> | <p><b>IMPORTANT:</b> The following supersedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.</p> |
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