Our mission: provide unique bonding technologies that create value for our customers

Araldite®
The adhesives serving worldwide manufacturing industry for more than half a century

Structural bonding techniques play a key role in today’s assembly operations. As designers strive to bring lightweight and durable products to market in the quickest time possible, they increasingly choose industrial adhesives as the best solution for complex design issues.

Based on 60 years heritage as pioneers in high performance adhesive technology, Huntsman has developed an extensive range of adhesives to provide solutions to the great majority of design issues engineers face on a daily basis.

Adhesives deliver long term performance and durability

Adhesive bonding enables the most efficient use of materials, maximising their long-term potential while optimising manufacturing methods with easy handling and processing.

Compared to mechanical joining, adhesive bonding allows the assembly of dissimilar substrates and higher weight loads to be carried while offering more uniform stress distribution across the entire bonded joint and superior fatigue resistance.

Adhesives facilitate the integrity and strength of materials as there are no holes, rivets or fastening elements to weaken the structure. Without any visible joining elements, nothing detracts from the aesthetics of the finished parts and greater lightweight design flexibility can be achieved.

Additionally, adhesives offer the potential to reduce costs in parts production through streamlined assembly processes and hence faster cycle times.

Therefore adhesives have become essential in manufacturing exterior and interior parts in order to deliver superior performance, durability, and aesthetic.

We deliver more than just products

Huntsman’s high performance structural adhesives are designed for those who require high strength in their assemblies at reduced production process costs.

Our products help overcome a wide variety of challenges such as fast curing cycles with high initial green strength, durability under dynamic stress, impact resistance, corrosion resistance, and multi-substrate joining.

As a strategic partner to many industries, our company keeps on tailoring its products and services to the evolving needs. Based on state-of-the-art epoxy, polyurethane and methyl methacrylate technologies, Araldite® adhesives provide superior joining and bonding solutions for plastics, metals, composite materials and other substrates. This results in higher productivity rates, increased design freedoms, secured long-term performance and safety of assemblies.

All Huntsman’s products are tested in-house in certified mechanical testing laboratories to ensure they provide the desired properties. Moreover our global manufacturing footprint, our experienced technical support teams and our extended network of distributors ensure close proximity with our customers.
Strength in bonding

The Araldite® adhesives range for assembly operations contains a selection of adhesives from the latest epoxy, polyurethane and methacrylate technologies to meet the great majority of high-performance bonding applications.

**Araldite® adhesives range for assembly operations**

From adhesives with long open times for large area applications to fast-curing adhesives for early removal from fixtures and rapid through-put, this range includes adhesives which are resistant to high temperature, water and chemicals. Liquid adhesives as well as thixotropic adhesives for gap-filling or vertical applications can be found in this range. Adhesives with highest strength can be selected from this range as well as tough and impact-resistant adhesives with a well-balanced combination of strength and flexibility and also elastic adhesives to cope with different thermal expansions when bonding larger structures of dissimilar materials.

Products from the Araldite® adhesives range for assembly operations are available in a variety of packaging including easy-to-use cartridges with static mixers and working packs for manual applications as well as hotboxes and drums for higher volume applications. The Araldite® adhesives range for assembly operations will continuously be updated to meet the newest demands of innovative design using the bonding technology.

**Epoxies**

**1-C epoxy adhesives**
- excellent adhesion to metals, thermoset and thermoplastic composites
- outstanding lap shear strength and peel strength
- very high impact resistance
- excellent chemical resistance
- easy processing

**2-C epoxy adhesives**
- excellent adhesion to metals and thermoset composites
- high strength and high stiffness
- high creep resistance
- high fatigue resistance
- high temperature resistance
- excellent chemical resistance
- low shrinkage

**Methacrylates**

**2-C methyl methacrylate adhesives**
- excellent adhesion to metals, thermoset composites and most thermoplastics
- good adhesion with minimum surface preparation
- tolerant to mix-ratio variations
- wide spectrum of available reactivity
- optimum ratio open-time / cure time
- mechanical properties from rigid to flexible
- good long-term durability

**No-mix methyl methacrylate adhesives**
- long open-time and rapid cure
- good adhesion with minimum surface preparation
- high process flexibility
- suitable for high production speed
- high toughness
- good long-term durability

**Polyurethanes**

**2-C polyurethane adhesives**
- excellent adhesion to most thermoplastics and composite materials
- good adhesion to metals
- mechanical properties from rigid to flexible
- good long-term durability
- good combination of strength and flexibility
The Araldite® adhesives range offers high performance bonding solutions for a wide variety of applications in assembly operations and maintenance. Our products have been designed to meet the key requirements of many industry sectors.

- Electrical engineering and electronics
- Filter manufacturing
- Heating, ventilating, air conditioning
- Machineries
- Marine
- Medical
- On-site and off-site construction
- Pipes and tanks
- Renewable energies
- Sign and display
- Sport and leisure
- Transportation
- White goods
**Reliable and comprehensive bonding solutions**

**Short pot life - less than 10 minutes**

| Product designation | Technology | Pot life | Fixture time | Key benefits | Color | Viscosity | Gap filling capability | E-modulus* | Elongation at break* | Lap shear strength on aluminum** | Maximum service temperature*** | Resistance to water / humidity | Resistance to chemicals | Mix ratio by weight | Mix ratio by volume | Metals | Thermosets composites | Thermoplastics | Various substrates |
|---------------------|------------|----------|--------------|--------------|-------|------------|------------------------|-------------|---------------------|--------------------------------|-------------------------------|-------------------------------|-----------------|-----------------|-----------------|-------------------|---------|------------------|
| Araldite® AW 4428 / Hardener HW 4455 | EP 1.5 5 | Very short gel time Multipurpose | yellow | 25 | 1 | 100 | 5 | 22 | 60 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| XG 4601 A/B | Araldite® 2021 | MMA 3 8 | Non-sagging Toughened | yellow | thixotropic | 3 | 2 | 000 | 5 | 22 | 100 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| Araldite® AW 4700 / Hardener HY 4710 | PUR 4 50 | Transparent Flexible | transparent | 10 | <1 | 200 | 50 | 21 | 60 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| Araldite® AW 4829-1 / Hardener HY 4828 | PUR 6 15 | Transparent UV Stable | transparent | 5 | <1 | 15 | 60 | 15 | 55 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| Araldite® AW 2104 / Hardener HW 2954 | Araldite® 2012 | EP 6 20 | Short gel time Multipurpose | yellow | 30 | 0.5 | 2 | 500 | 4 | 18 | 70 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| Araldite® AW 2101 / Hardener HW 2051 | Araldite® AW 2101 / Hardener HW 2051 | EP 6 60 | Rigid Low shrinkage | grey | thixotropic | 5 | 5 | 000 | 1 | 20 | 100 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| Araldite® F 310 / Hardener K 100-1 RED | Araldite® 2010-1 | MMA 10 16 | Medium open time Good thermal stability | red | 20 | 8 | 2 | 000 | 2 | 24 | 100 | • | 100 : 11 | 100 : 10 | 100 : 10 | 100 : 10 |
| Araldite® F 4019 / Hardener XD 4444 | Araldite® 2010-1 | EP 10 30 | Toughened Good chemical resistance | yellow | 80 | 2 | 2 | 000 | 4 | 18 | 100 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| Araldite® F 347 / Hardener K 100-1 RED | Araldite® 2047-1 | MMA 10 15 | Bonds difficult metals Flexible | brown | 70 | 3 | 850 | 15 | 18 | 100 | • | 100 : 11 | 100 : 10 | 100 : 10 | 100 : 10 |
| XD 4602 A/B | Araldite® 2022 | MMA 10 18 | Non-sagging Toughened | yellow | thixotropic | 3 | 2 | 000 | 5 | 25 | 100 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |
| Araldite® F 348 / Hardener F 346 | Araldite® 2048 | MMA 10 35 | Flexible Gap filling | red | thixotropic | 8 | 350 | 90 | 24 | 100 | • | 100 : 100 | 100 : 100 | 100 : 100 | 100 : 100 |

*measured following ISO 527 (Curing 16h at 40°C)  
**measured following ISO 4587 (Curing 16h at 40°C)  
***maximum temperature giving LSS > 5 MPa or maximum temperature giving 33% of LSS at 23°C  
Cure temperature at RT possible (full cure achieved after 7 days)
### Reliable and comprehensive bonding solutions

#### Medium pot life - from 15 to 40 minutes

<table>
<thead>
<tr>
<th>Product designation</th>
<th>Technology</th>
<th>Pot life</th>
<th>Fixture time</th>
<th>Key benefits</th>
<th>Color</th>
<th>Viscosity</th>
<th>Gap filling capability</th>
<th>E-modulus*</th>
<th>Elongation at break*</th>
<th>Lap shear strength on aluminum**</th>
<th>Maximum service temperature***</th>
<th>Resistance to water/humidity</th>
<th>Resistance to chemicals</th>
<th>Mix ratio by weight</th>
<th>Mix ratio by volume</th>
<th>Metals</th>
<th>Thermosets composites</th>
<th>Thermo-plastics</th>
<th>Various substrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Araldite® F 252 / Hardener K 100-1 RED</td>
<td>Araldite® 2052-1</td>
<td>MMA</td>
<td>15</td>
<td>20</td>
<td>Temperature resistant Toughened</td>
<td>red</td>
<td>80</td>
<td>3</td>
<td>1 700</td>
<td>10</td>
<td>24</td>
<td>140</td>
<td>**</td>
<td>**</td>
<td>100 : 12</td>
<td>100 : 10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Araldite® AV 4446 / Hardener HY 4445</td>
<td>Araldite® 2018</td>
<td>PUR</td>
<td>40</td>
<td>240</td>
<td>UV Stable Flexible</td>
<td>opaque</td>
<td>8</td>
<td>1</td>
<td>15</td>
<td>46</td>
<td>7</td>
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<td>•</td>
<td>•</td>
<td>100 : 95</td>
<td>100 : 100</td>
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<tr>
<td>Araldite® AV 4752 / Hardener HW 4753</td>
<td>Araldite® 2020-1</td>
<td>EP</td>
<td>40</td>
<td>240</td>
<td>Suitable for filter bonding Resistant to chemicals</td>
<td>dark grey</td>
<td>25</td>
<td>1</td>
<td>5 500</td>
<td>1</td>
<td>16</td>
<td>110</td>
<td>**</td>
<td>**</td>
<td>100 : 48</td>
<td>100 : 50</td>
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<tr>
<td>Araldite® AV 4840-1 / Hardener HW 4841</td>
<td>Araldite® 2029-1</td>
<td>PUR</td>
<td>40</td>
<td>240</td>
<td>High elongation at break High strength</td>
<td>dark grey</td>
<td>60</td>
<td>5</td>
<td>550</td>
<td>40</td>
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<td>•</td>
<td>•</td>
<td>100 : 82</td>
<td>100 : 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Araldite® AV 5308 / Hardener HW 5309-1</td>
<td>Araldite® 2035</td>
<td>EP</td>
<td>40</td>
<td>240</td>
<td>Temperature resistant Resistant to chemicals</td>
<td>grey</td>
<td>35</td>
<td>2</td>
<td>700</td>
<td>1</td>
<td>14</td>
<td>140</td>
<td>**</td>
<td>**</td>
<td>100 : 40</td>
<td>100 : 40</td>
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</tbody>
</table>

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**Conditions**: 100g at 23°C mixed

**Unit**: min min Pa s mm MPA % MPA °C

**Bulk** Cartridge

**Cure temperature at RT possible (full cure achieved after 7 days)**

*measured following ISO 527 (Curing 16h at 40°C)  **measured following ISO 4587 (Curing 16h at 40°C)

***maximum temperature giving LSS > 5MPa or maximum temperature giving 33% of LSS at 23°C

Cure temperature at RT possible (full cure achieved after 7 days)
### Reliable and comprehensive bonding solutions

- **Long pot life - from 45 to 70 minutes**

<table>
<thead>
<tr>
<th>Product designation</th>
<th>Technology</th>
<th>Pot life</th>
<th>Fixature time</th>
<th>Key benefits</th>
<th>Color</th>
<th>Viscosity</th>
<th>Lap shear strength on aluminum</th>
<th>E-modulus*</th>
<th>Elongation at break*</th>
<th>Maximum service temperature***</th>
<th>Resistance to water / humidity</th>
<th>Mix ratio by weight</th>
<th>Mix ratio by volume</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Araldite®</strong> 2020</td>
<td>EP 45 960</td>
<td>Very low viscosity</td>
<td>Transparent</td>
<td>0,15</td>
<td>&lt;1</td>
<td>2.800</td>
<td>4</td>
<td>16</td>
<td>60</td>
<td>•</td>
<td>100:30</td>
<td>100:35</td>
<td></td>
</tr>
<tr>
<td><strong>Araldite®</strong> AV 105-1 / Hardener HY 901</td>
<td>EP 45 360</td>
<td>Self leveling</td>
<td>Resistant to weathering</td>
<td>brown</td>
<td>15</td>
<td>1</td>
<td>1600</td>
<td>1</td>
<td>14</td>
<td>120</td>
<td>•</td>
<td>100:50</td>
<td>100:60</td>
</tr>
<tr>
<td><strong>Araldite®</strong> AV 4738 / Hardener HV 4739</td>
<td>EP 45 160</td>
<td>Resistant to temperature</td>
<td>Resistant to drinking water</td>
<td>grey</td>
<td>5</td>
<td>3</td>
<td>000</td>
<td>1,5</td>
<td>16</td>
<td>150</td>
<td>•</td>
<td>100:25</td>
<td>100:22</td>
</tr>
<tr>
<td><strong>Araldite®</strong> F 349 / Hardener paste or powder</td>
<td>MMA 50 90</td>
<td>Resistant to acids</td>
<td>Adhesion on thermostats</td>
<td>brown</td>
<td>15</td>
<td>1</td>
<td>2300</td>
<td>2</td>
<td>25</td>
<td>120</td>
<td>•</td>
<td>100:3</td>
<td>n.a.</td>
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<tr>
<td><strong>Araldite®</strong> AW 136 H / Hardener HY 901</td>
<td>EP 60 480</td>
<td>Self leveling</td>
<td>Resistant to weathering</td>
<td>grey</td>
<td>25</td>
<td>1</td>
<td>3000</td>
<td>2</td>
<td>13</td>
<td>110</td>
<td>•</td>
<td>100:35</td>
<td>100:45</td>
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<tr>
<td><strong>Araldite®</strong> AW 136 H / Hardener HV 937</td>
<td>EP 60 480</td>
<td>Good adhesion on rubbers</td>
<td>Suitable for clear coating</td>
<td>grey</td>
<td>25</td>
<td>1</td>
<td>3000</td>
<td>2</td>
<td>13</td>
<td>110</td>
<td>•</td>
<td>100:35</td>
<td>100:45</td>
</tr>
<tr>
<td><strong>Araldite®</strong> AV 135-1 / Hardener HW 5323</td>
<td>EP 60 160</td>
<td>Resistant to temperature</td>
<td>Resistant to drinking water</td>
<td>dark grey</td>
<td>5</td>
<td>4</td>
<td>000</td>
<td>1</td>
<td>16</td>
<td>140</td>
<td>•</td>
<td>100:50</td>
<td>100:50</td>
</tr>
<tr>
<td><strong>Araldite®</strong> AV 4776-1 / Hardener HV 5309-1</td>
<td>EP 60 360</td>
<td>Toughened</td>
<td>Resistant to weathering</td>
<td>neutral</td>
<td>10</td>
<td>1</td>
<td>000</td>
<td>5</td>
<td>24</td>
<td>100</td>
<td>•</td>
<td>100:116</td>
<td>100:100</td>
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<tr>
<td><strong>Araldite®</strong> AV 4776-1 BK / Hardener HV 5309-1 BK</td>
<td>EP 60 360</td>
<td>Toughened</td>
<td>High peel strength</td>
<td>neutral</td>
<td>10</td>
<td>1</td>
<td>500</td>
<td>5</td>
<td>29</td>
<td>70</td>
<td>•</td>
<td>100:44</td>
<td>100:50</td>
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<tr>
<td><strong>Araldite®</strong> AV 144-2 / Hardener HV 937</td>
<td>EP 60 240</td>
<td>Non sagging paste</td>
<td>Multipurpose</td>
<td>grey</td>
<td>5</td>
<td>2</td>
<td>250</td>
<td>1</td>
<td>17</td>
<td>70</td>
<td>•</td>
<td>100:60</td>
<td>100:100</td>
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<tr>
<td><strong>Araldite®</strong> AW 5047-1 / Hardener HW 5007</td>
<td>EP 70 420</td>
<td>Self leveling</td>
<td>Temperature resistant</td>
<td>white</td>
<td>16</td>
<td>0,5</td>
<td>3000</td>
<td>1</td>
<td>22</td>
<td>140</td>
<td>•</td>
<td>100:30</td>
<td>100:45</td>
</tr>
</tbody>
</table>

*Measured following ISO 527 (Curing 16h at 40°C) | **Measured following ISO 4587 (Curing 16h at 40°C) |

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<table>
<thead>
<tr>
<th>Conditions 100g at 23°C mixed</th>
<th>Unit</th>
<th>min</th>
<th>min</th>
<th>Pa.s</th>
<th>mm</th>
<th>MPa</th>
<th>%</th>
<th>MPa</th>
<th>°C</th>
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<td><strong>Bulk</strong></td>
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<tr>
<td><strong>Cartridge</strong></td>
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<td><strong>XW 396 / XW 397</strong></td>
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<tr>
<td><strong>Araldite® 2020 (working pack)</strong></td>
<td>EP 45 960</td>
<td>Very low viscosity</td>
<td>Suitable for clear coating</td>
<td>transparent</td>
<td>0,15</td>
<td>&lt;1</td>
<td>2.800</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td><strong>Araldite® AV 105-1 / Hardener HY 901</strong></td>
<td>EP 45 360</td>
<td>Self leveling</td>
<td>Resistant to weathering</td>
<td>brown</td>
<td>15</td>
<td>1</td>
<td>1600</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td><strong>Araldite® AV 4738 / Hardener HV 4739</strong></td>
<td>EP 45 160</td>
<td>Resistant to temperature</td>
<td>Resistant to drinking water</td>
<td>grey</td>
<td>5</td>
<td>3</td>
<td>000</td>
<td>1,5</td>
<td>16</td>
</tr>
<tr>
<td><strong>Araldite® F 349 / Hardener paste or powder</strong></td>
<td>MMA 50 90</td>
<td>Resistant to acids</td>
<td>Adhesion on thermostats</td>
<td>brown</td>
<td>15</td>
<td>1</td>
<td>2300</td>
<td>2</td>
<td>25</td>
</tr>
<tr>
<td><strong>Araldite® AW 136 H / Hardener HY 901</strong></td>
<td>EP 60 480</td>
<td>Self leveling</td>
<td>Resistant to weathering</td>
<td>grey</td>
<td>25</td>
<td>1</td>
<td>3000</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td><strong>Araldite® AW 136 H / Hardener HV 937</strong></td>
<td>EP 60 480</td>
<td>Good adhesion on rubbers</td>
<td>Suitable for clear coating</td>
<td>grey</td>
<td>25</td>
<td>1</td>
<td>3000</td>
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<td>13</td>
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<td>Resistant to temperature</td>
<td>Resistant to drinking water</td>
<td>dark grey</td>
<td>5</td>
<td>4</td>
<td>000</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td><strong>Araldite® AV 4776-1 / Hardener HV 5309-1</strong></td>
<td>EP 60 360</td>
<td>Toughened</td>
<td>Resistant to weathering</td>
<td>neutral</td>
<td>10</td>
<td>1</td>
<td>000</td>
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<td>24</td>
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<td>EP 60 360</td>
<td>Toughened</td>
<td>High peel strength</td>
<td>neutral</td>
<td>10</td>
<td>1</td>
<td>500</td>
<td>5</td>
<td>29</td>
</tr>
<tr>
<td><strong>Araldite® AV 144-2 / Hardener HV 937</strong></td>
<td>EP 60 240</td>
<td>Non sagging paste</td>
<td>Multipurpose</td>
<td>grey</td>
<td>5</td>
<td>2</td>
<td>250</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td><strong>Araldite® AW 5047-1 / Hardener HW 5007</strong></td>
<td>EP 70 420</td>
<td>Self leveling</td>
<td>Temperature resistant</td>
<td>white</td>
<td>16</td>
<td>0,5</td>
<td>3000</td>
<td>1</td>
<td>22</td>
</tr>
</tbody>
</table>

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**Suitability:** Excellent | Good | Moderate | Excellent | Good
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1. Maximum service temperature giving LSS > 5MPa or maximum temperature giving 33% of LSS at 23°C
2. Cure temperature at RT possible (full cure achieved after 7 days) except Araldite® 4738 / Hardener HV 4739 at minimum 80°C and Araldite® AW 5047-1 / Hardener HW 5007 at minimum 40°C
3. **Suitability:** Excellent | Good | Moderate | Excellent | Good
4. *Measured following ISO 527 (Curing 16h at 40°C) | **Measured following ISO 4587 (Curing 16h at 40°C)
<table>
<thead>
<tr>
<th>Product designation</th>
<th>Technology</th>
<th>Pot life</th>
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<th>Color</th>
<th>Viscosity</th>
<th>Gap filling capability*</th>
<th>E-modulus**</th>
<th>Elongation at break*</th>
<th>Lap shear strength on aluminum***</th>
<th>Maximum service temperature</th>
<th>Resistance to water / humidity</th>
<th>Resistance to chemicals</th>
<th>Mix ratio</th>
<th>Metals</th>
<th>Thermosets</th>
<th>Composites</th>
<th>Thermoplastics</th>
<th>Various substrate suitability</th>
</tr>
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<tbody>
<tr>
<td>Araldite® AY 103-1 / Hardener HY 905</td>
<td>EP 90 720</td>
<td>Self-levelling</td>
<td>Multi-purpose</td>
<td>yellow</td>
<td>5</td>
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<td>1000</td>
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<td>15</td>
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<td>100 / 50</td>
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<td>EP 90 300</td>
<td>High temperature resistance</td>
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<td>grey</td>
<td>10</td>
<td>0.5</td>
<td>3000</td>
<td>2</td>
<td>13</td>
<td>110</td>
<td>100 / 29</td>
<td>100 / 38</td>
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<td>Resistant to chemicals</td>
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<td>0.5</td>
<td>200</td>
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<td>16</td>
<td>180</td>
<td>100 / 60</td>
<td>100 / 50</td>
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<td>XB 5090-1 / Arathane® HY 5611-1</td>
<td>PUR 100 360</td>
<td>Easy to spread</td>
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<td>4</td>
<td>&lt;1</td>
<td>27</td>
<td>40</td>
<td>20</td>
<td>60</td>
<td>100 / 20</td>
<td>100 / 25</td>
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<td>Araldite® AW 106 / Hardener HY 315 U</td>
<td>Araldite® 2011</td>
<td>Multipurpose</td>
<td>Resistant to dynamic loading</td>
<td>pale yellow</td>
<td>40</td>
<td>1</td>
<td>1900</td>
<td>9</td>
<td>26</td>
<td>90</td>
<td>100 / 80</td>
<td>100 / 100</td>
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<td>Araldite® AW 4859 / Hardener HW 4859</td>
<td>Resistant to high temperature</td>
<td>High toughness</td>
<td>black</td>
<td>10</td>
<td>1</td>
<td>500</td>
<td>5</td>
<td>33</td>
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<td>100 / 50</td>
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<td>Araldite® AW 4033 / Hardener HW 4833</td>
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<td>Flame retardant</td>
<td>Long pot life</td>
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<td>1</td>
<td>600</td>
<td>40</td>
<td>16</td>
<td>100</td>
<td>100 / 86</td>
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<td>Araldite® 420 A/B</td>
<td>Araldite® 420 A/B</td>
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<td>100 / 50</td>
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<td>1</td>
<td>600</td>
<td>10</td>
<td>38</td>
<td>90</td>
<td>100 / 42</td>
<td>100 / 50</td>
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<td>0.5</td>
<td>200</td>
<td>1</td>
<td>21</td>
<td>200</td>
<td>100 / 15</td>
<td>100 / 28</td>
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</table>

*Measured following ISO 527 (Curing 16h at 40°C) ** Measured following ISO 4587 (Curing 16h at 40°C) *** Maximum temperature giving 25% or maximum temperature giving 30% of LSS at 20°C

Cure temperature at RT possible. Full cure achieved after 7 days except Araldite® AW 4510 / Hardener HW 4511 at minimum 80°C, Araldite® AW 4859 / Hardener HW 4859 at minimum 70°C and Araldite® AW 4804 / Hardener HW 4804 at minimum 120°C.

Suitability: Excellent I Good I Moderate I Excellent / Good
### No-mix and 1 component adhesive

<table>
<thead>
<tr>
<th>Product designation</th>
<th>Technology</th>
<th>Pot life</th>
<th>Fixture time</th>
<th>Key benefits</th>
<th>Color</th>
<th>Viscosity</th>
<th>Gap filling capability</th>
<th>E-modulus*</th>
<th>Lap shear strength on aluminum**</th>
<th>Maximum storage temperature***</th>
<th>Resistance to water / humidity</th>
<th>Resistance to chemicals</th>
<th>Mix ratio</th>
<th>Metals</th>
<th>Thermosets</th>
<th>Thermoplastics</th>
<th>Various substrates</th>
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<tr>
<td><strong>Araldite® F 300 / Hardener lacquer</strong></td>
<td>MMA</td>
<td>n.a.</td>
<td>3</td>
<td>Very fast handling strength</td>
<td>High strength and toughness</td>
<td>reddish brown</td>
<td>25</td>
<td>0.4</td>
<td>2300</td>
<td>7</td>
<td>23</td>
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<td>*</td>
<td>*</td>
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<td>Very fast handling strength</td>
<td>High strength and toughness</td>
<td>reddish brown</td>
<td>25</td>
<td>2</td>
<td>3300</td>
<td>7</td>
<td>23</td>
<td>100</td>
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<td>*</td>
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<td><strong>Araldite® F 305 / Hardener lacquer 2</strong></td>
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<td>5</td>
<td>Low viscosity</td>
<td>High strength</td>
<td>brown</td>
<td>4</td>
<td>0.4</td>
<td>1000</td>
<td>20</td>
<td>24</td>
<td>90</td>
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<td>4</td>
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<td>500</td>
<td>20</td>
<td>24</td>
<td>90</td>
<td>*</td>
<td>*</td>
<td>100 : 100 : 6</td>
<td>n.a.</td>
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<td>5</td>
<td>For difficult metals</td>
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<td>brown</td>
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<td>&lt; 1</td>
<td>500</td>
<td>30</td>
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<td>8</td>
<td>Rigid adhesive</td>
<td>Low shrinkage</td>
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<td>400</td>
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<td>500</td>
<td>2</td>
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<td>100</td>
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<td>*</td>
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<td><strong>Araldite® F 310 / Hardener lacquer 2</strong></td>
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<td>15</td>
<td>Bonds difficult metals</td>
<td>Flexible</td>
<td>brown</td>
<td>70</td>
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<td>18</td>
<td>Medium open time</td>
<td>Good thermal stability</td>
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<td>20</td>
<td>0.4</td>
<td>2000</td>
<td>2</td>
<td>24</td>
<td>100</td>
<td>*</td>
<td>*</td>
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<td>20</td>
<td>Medium open time</td>
<td>Good thermal stability</td>
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<td>1</td>
<td>2000</td>
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<td>24</td>
<td>100</td>
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<td>20</td>
<td>1</td>
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<td>2</td>
<td>24</td>
<td>100</td>
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<td>*</td>
<td>n.a.</td>
<td>n.a.</td>
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<td>n.a.</td>
<td>18</td>
<td>Medium open time</td>
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<td>brown</td>
<td>20</td>
<td>0.4</td>
<td>2000</td>
<td>2</td>
<td>24</td>
<td>100</td>
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<td>*</td>
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<td><strong>Araldite® F 330 / Hardener lacquer 2</strong></td>
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<td>Temperature resistant</td>
<td>Toughened</td>
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<td>0.4</td>
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<td>High toughness</td>
<td>off-white</td>
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<td>28</td>
<td>160</td>
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<td>High temperature resistance</td>
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<td>4000</td>
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<td>160</td>
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</table>

* measured following ISO 527 (Curing 16h at 40°C)
** measured following ISO 4587 (Curing 16h at 40°C)
*** maximum temperature giving LSS > 5MPa or maximum temperature giving 33% of LSS at 23°C

Cure temperature at RT possible (but cure achieved after 7 days) except Araldite® AV 170 at minimum 140°C and Araldite® AV 4600 at minimum 150°C.
We value your challenge

By providing unique, certified or patented technologies, combined with high quality and reliability, our chemists and experts bring enhanced value to our customers, ensuring their success.

With innovation
Every day, all over the world, our Technical Competence centers engage in intensive research and development focusing on one goal: to deliver innovative solutions by working hand-in-hand with our business partners. Together through a continual exchange of ideas, supported by an experienced team of sales and technical specialists, we strive to deliver innovative and regulatory compliant (eg REACH compliant) solutions.

We track both new market expectations and changing regulations. Protection of the environment, as well as health and safety are paramount concerns, playing an integral part in our development projects.

With customer intimacy
We market a unique product portfolio and a broad range of forward-looking solutions for our customers. Customers and partners benefit from an advanced level of service in:

> product selection and quality
> product trials in-house and with customers
> customer seminars and trainings
> technical service and solution-providing

Partnership with our customers is more than simply “putting them first”. It requires long-term commitment to forging close relationships that create synergies of knowledge, security and adaptability to create a successful, shared future.

With care
Sustainability is a fundamental part of our corporate and business strategy. We see a better world in which our innovations help reduce consumption of natural resources and improve the quality of life for people everywhere. We are identifying the long-term trends that affect our markets and looking to see how products and applications can play a part in supporting and providing solutions to the challenges those markets face.
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Our Advanced Materials division is a leading global chemical solutions provider with a long heritage of pioneering technologically advanced epoxy, acrylic and polyurethane-based polymer products.

Our capabilities in high-performance adhesives and composites, delivered by more than 1,600 associates, serve over 2,000 global customers with innovative, tailor-made solutions and more than 1,500 products which address global engineering challenges.

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