

# A total solution to high performance adhesive bonding

## One stop shop technology for structural bonding of plastics

### • Fully comprehensive range of structural adhesives

The Araldite® 2000 PLUS range adhesives for plastics can be used under a broad spectrum of processing and curing conditions and can meet the most demanding performance requirements. The range includes leading-edge epoxy, polyurethane and toughened acrylic technologies providing a complete solution to structural bonding.

### • Broad range of easy to use packing sizes

Araldite® 2000 PLUS adhesives are available in a wide range of cartridge systems and small packs for convenient handling. These options allow the user to accurately deliver a measured quantity of adhesive with minimum wastage.

### • Local availability

No matter where you are in the world, Huntsman's strong global network means Araldite® 2000 PLUS adhesives can be supplied locally. Our operations span 30 countries and are supported by an established worldwide distribution framework.

## Setting the industry standard for technical support

### • Comprehensive telephone technical support

Huntsman sets the standard for technical support. Its industry experts can provide advice at a local level and can rapidly respond to customer challenges.

### • On site technical assistance

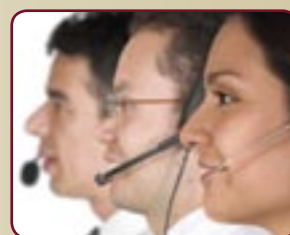
Our network of technical support staff can give on site demonstrations and provide expert advice to find the best solution for a range of technical challenges.

### • Access to significant case history database

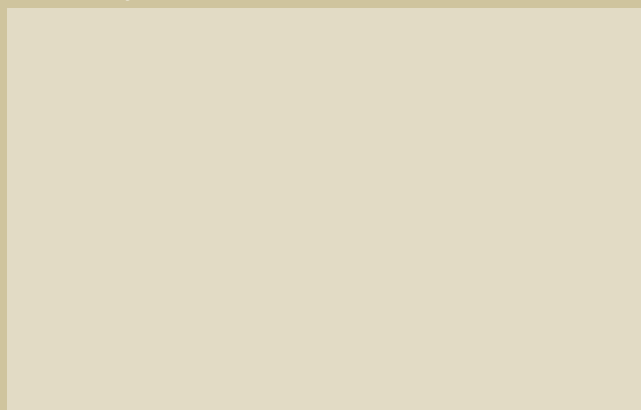
The Araldite® 2000 PLUS range can be used across a vast range of structural engineering applications. Sample case studies from our extensive library available on our website [www.araldite2000plus.com](http://www.araldite2000plus.com).

### • Additional reference guides available

Araldite® has been a leading adhesive brand for 60 years and our experience is reflected in our comprehensive technical support packages which can be accessed through our website and provide a complete solution to all adhesive processing and performance needs.



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[www.araldite2000plus.com](http://www.araldite2000plus.com)

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Enriching lives through innovation

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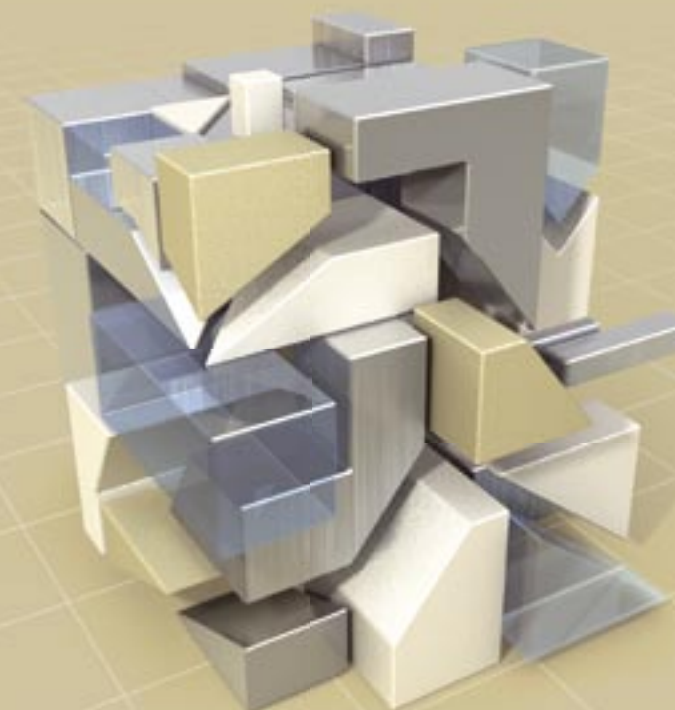
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Design: www.zygmund.fr

# Araldite® 2000+

Strength in bonding

bonding **plastics**  
to plastics and dissimilar substrates



# The appropriate solution for Bonding plastics to any substrates

Huntsman's recognised expertise in research and development allows us to offer a uniquely wide range of innovative solutions all of which are backed by strong technical support and excellent levels of customer service. Araldite® 2000 PLUS adhesives are designed to satisfy all your plastic bonding requirements.

	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055
	Multi purpose	Rapid cure		Chemical/temperature resistance		Toughened				Flexible			Rigid
Chemical type	EP	EP	EP	EP	EP	EP	MMA	MMA	MMA	PUR	PUR	PUR	PUR
Fast curing		■	■				■	■	■				
Gap filling				■	■	■	■	■	■	■	■	■	■

## BONDING PLASTICS TO PLASTICS

	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055
GRP	●	○	●	●	●	●	●	●	○	●	●	●	●
CFRP	●	●	●	●	●	●	●	●	○	○	○	●	○
SMC	●	○	○	●	●	●	○	○	○	●	○	●	●
ABS	●	○	○	○	○	○	○	●	○	●	○	●	●
PVC	○	○	○	○	○	○	●	●	●	○	○	○	●
PMMA	○	○	○	○	○	●	●	●	●	○	○	●	○
Polycarbonate	○	○	○	○	○	○	●	●	●	●	●	●	○
Polyamides	●	○	○	○	○	○	●	○	○	○	○	○	○

## BONDING PLASTICS TO METALS

	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055
Ferrous metals	●	○	●	●	●	●	●	●	○	○	○	○	○
Stainless steel	●	●	●	●	●	●	●	●	○	○	○	○	●
Aluminium	●	●	●	●	●	●	●	●	○	○	○	○	●
Copper	●	●	●	●	●	●	●	○	○	○	○	○	●
Brass	●	●	●	●	●	●	●	●	○	○	○	○	○
Zinc/Galvanised metal	●	●	○	●	●	○	○	●	●	○	○	○	○

## BONDING PLASTICS TO NON METALS

	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055
Rubbers	○	○	○	○	○	○	○	○	○	○	○	○	○
Glass	○	○	○	○	○	○	○	○	○	○	○	○	○
Ceramics	●	○	●	●	○	○	●	●	○	○	○	○	○
Wood	●	●	●	●	●	●	○	○	○	○	○	○	○

EP Epoxy / MMA Methyl Methacrylate / PUR Polyurethane • ● Excellent / ○ Good / ○ Moderate



# Processing, performance and packaging data

Araldite® 2000 PLUS is a trusted brand – with more than 60 years experience in developing engineering adhesives.



Bonding plastics	Multi purpose		Rapid cure		Chemical / temperature resistance		Toughened				Flexible			Rigid
	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055	
Chemical type	EP	EP	EP	EP	EP	EP	MMA	MMA	MMA	PUR	PUR	PUR	PUR	
Product description	<ul style="list-style-type: none"> <li>Multi purpose</li> <li>Long working life</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Fast curing</li> <li>Toughened</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Fast curing</li> <li>General purpose</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Metal coloured paste</li> <li>Suitable for vertical applications</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Grey paste</li> <li>High temperature and chemical resistance</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Toughened paste</li> <li>Ideal for GRP, SMC and dissimilar substrates</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Rapid curing</li> <li>High peel strength</li> <li>Multi purpose</li> </ul>	<ul style="list-style-type: none"> <li>Good sanding properties</li> <li>Ideal for bonding thermoplastics</li> </ul>	<ul style="list-style-type: none"> <li>Gap filling</li> <li>Requires minimal surface treatment</li> </ul>	<ul style="list-style-type: none"> <li>Good UV stability</li> <li>Ideal for bonding thermoplastics</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Ideal for bonding plastics</li> <li>Low shrinkage</li> <li>Ideal for thick bond lines</li> </ul>	<ul style="list-style-type: none"> <li>Black colour</li> <li>Ideal for bonding plastics especially SMC or polyamides</li> <li>Low shrinkage</li> </ul>	<ul style="list-style-type: none"> <li>Gap filling</li> <li>Long open time</li> <li>Resists weathering and humidity</li> <li>Low shrinkage</li> </ul>	

## PROCESSING DATA

	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055
Viscosity (at 23°C)	30-45 Pa.s	Apr. 80 Pa.s	25-35 Pa.s	Thixotropic	Thixotropic	Thixotropic	Apr. 45 Pa.s	Apr. 60 Pa.s	Apr. 70 Pa.s	Apr. 8 Pa.s	Apr. 50 Pa.s	Apr. 55 Pa.s	Thixotropic
Useable life of adhesive (at 23°C)													
In mixer nozzle	1.8 hr	10 min	8 min	1.3 hr	1 hr	40 min	3 min	10 min	5 min	40 min	15 min	15 min	45 min
100 g of mix	1.5 hr	6 min	5 min	60 min	1 hr	40 min	-	-	-	40 min	15 min	15 min	60 min
Time required to reach (at 23°C)													
Light handling strength (1 MPa)	7 hr	30 min	20 min	4 hr	3 hr	4 hr	8 min	18 min	5 min	4 hr	6 hr	3 hr	6 hr
50% of final shear strength	10 hr	3 hr	1 hr	10 hr	5 hr	6 hr	20 min	30 min	20 min	10 hr	20 hr	16 hr	20 hr
Time required to reach (at 60°C)													
50% of final shear strength	45 min	20 min	10 min	40 min	20 min	40 min	-	-	-	30 min	1.5 hr	60 min	60 min

## PERFORMANCE DATA

	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055
Lap shear strength on GRP substrate	11 MPa	5 MPa	9 MPa	8 MPa	9 MPa	9 MPa	8 MPa	8 MPa	6 MPa	8 MPa	7 MPa	8 MPa	9 MPa
Peel strength on Al substrate	5 N/mm	6 N/mm	5.5 N/mm	4 N/mm	3 N/mm	4 N/mm	11 N/mm	4 N/mm	3 N/mm	4 N/mm	4 N/mm	6 N/mm	1 N/mm
Typical Tg / Max temp giving LSS of 5 MPa	45°C / 90°C	40°C / 80°C	40°C / 80°C	45°C / 70°C	85°C / 140°C	65°C / 110°C	65°C / 110°C	45°C / 100°C	80°C / 90°C	Flex / 40°C	30°C / 50°C	30°C / 50°C	60°C / 90°C
Resistance properties													
Chemical	○	○	○	●	●	○	○	●	●	○	○	○	○
Heat	○	○	○	○	○	○	○	○	○	○	○	○	○
Water	○	○	○	○	○	○	○	○	○	○	○	○	○
Impact	●	●	○	○	○	○	○	○	○	○	○	○	○

## PACKAGING

	2011	2010-1	2012	2013	2014-1*	2015	2021	2022	2047**	2018	2040	2041-1	2055
Cartridges													
50 ml	■	■	■	■	■	■	■	■	■	■	■	■	■
200 ml	■	■	■	■	■	■	■	■	■	■	■	■	■
400 ml				■									
500 ml									■				
Working packs (2 kg kits)	■		■	■	■								

\* Araldite® 2014-1 is only registered for use in Europe. Araldite 2014® is directly equivalent in performance to 2014-1 and is available for regions outside of Europe.

\*\* Araldite® 2047 is currently only registered for use in Europe.