

A total solution to high performance adhesive bonding

One stop shop technology for structural bonding of metals

- **Fully comprehensive range of structural adhesives**

Araldite® 2000 PLUS adhesives for metals 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**

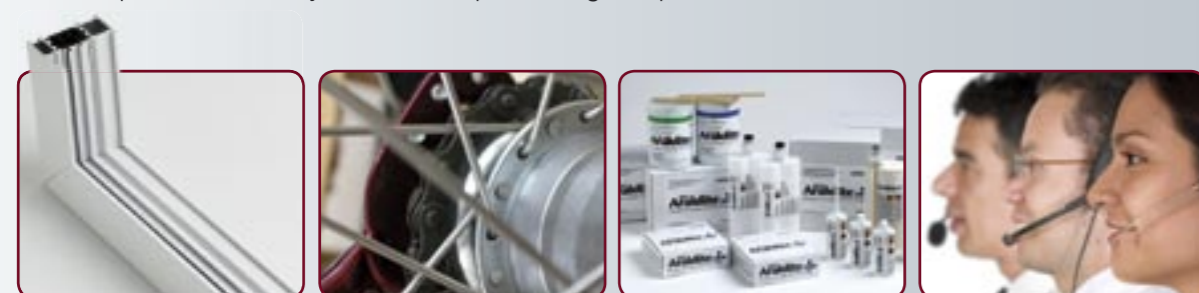
Our network of technical support staff can give on site demonstrations and provide expert advice to find the best solution for a range of technical challenges.

- **Access to significant case history database**

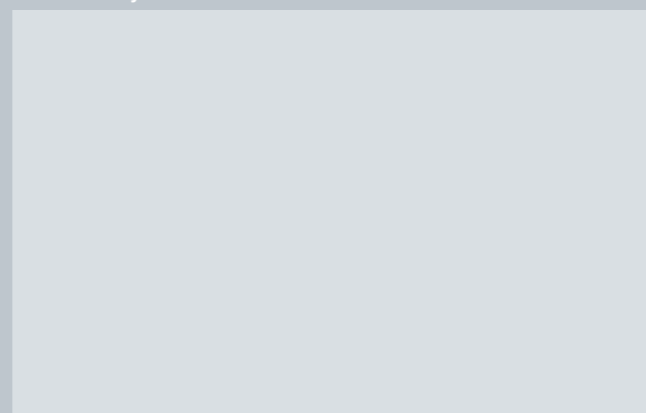
The Araldite® 2000 PLUS range can be used across a vast range of structural engineering applications. Sample case studies from our extensive library available on our website www.araldite2000plus.com

- **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 your adhesive processing and performance needs.



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HUNTSMAN

Enriching lives through innovation

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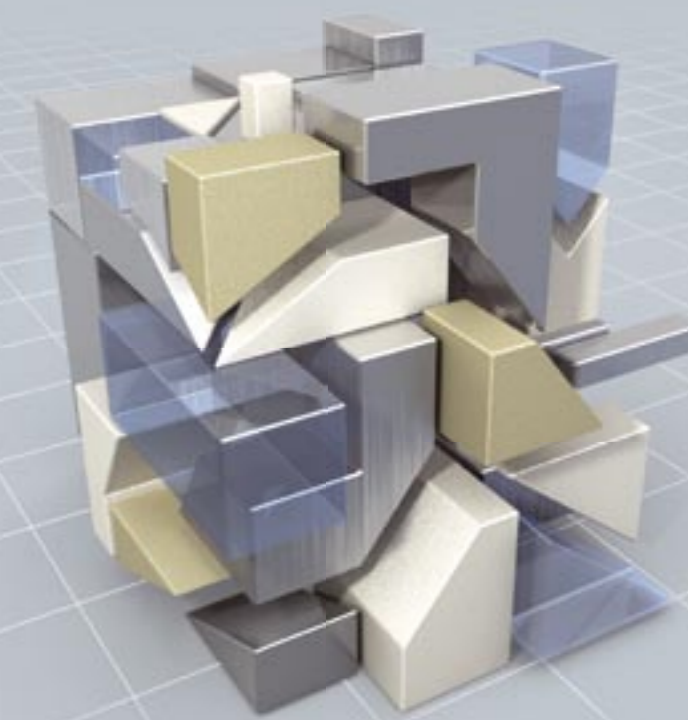
Araldite® 2000+

Strength in bonding

HUNTSMAN

Enriching lives through innovation

bonding **metals**
to metals and dissimilar substrates



The appropriate solution for

Bonding metals 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 is backed by strong technical support and excellent levels of customer service. Araldite® 2000 PLUS is a comprehensive range of adhesives designed to satisfy all your metal bonding requirements.

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

BONDING METALS TO METALS

	2011	2010-1	2012	2013	2014	2015	2021	2022	2055
Ferrous metals	●	○	●	●	●	●	●	●	○
Stainless steel	●	●	●	●	●	●	●	●	●
Aluminum	●	●	●	●	●	●	●	●	●
Copper	●	●	●	●	●	●	●	○	●
Brass	●	●	●	●	●	●	●	●	○
Zinc / Galvanised metal	●	●	○	●	●	○	○	●	●

BONDING METALS TO PLASTICS

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

BONDING METALS TO NON-METALS

	2011	2010-1	2012	2013	2014	2015	2021	2022	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 metals

Chemical type

Product description

PROCESSING DATA

Viscosity (at 73°F)

Useable life of adhesive (at 73°F)

In mixer nozzle

100 g (0.22 lb) of mix

Time required to reach (at 73°F)

Light handling strength (145 psi)

50% of final shear strength

Time required to reach (at 140°F)

50% of final shear strength

PERFORMANCE DATA

Lap shear strength on Al substrate

Peel strength on Al substrate

Typical Tg / Max temp giving LSS of 725 psi

Resistance properties

Chemical

Heat

Water

Impact

PACKAGING

Cartridges

50 ml

200 ml

400 ml

500 ml

Working packs (1.8 kg kits) (4 lb kits)

	Multi purpose	Rapid cure		Chemical / temperature resistance		Toughened			Rigid
	2011	2010-1	2012	2013	2014	2015	2021	2022	2055
	EP	EP	EP	EP	EP	EP	MMA	MMA	PUR
Product description	<ul style="list-style-type: none"> Multi purpose Long working life Low shrinkage 	<ul style="list-style-type: none"> Fast curing Toughened Low shrinkage 	<ul style="list-style-type: none"> Fast curing General purpose Low shrinkage 	<ul style="list-style-type: none"> Metal coloured paste Suitable for vertical applications Low shrinkage 	<ul style="list-style-type: none"> Gray paste High temperature and chemical resistance Low shrinkage 	<ul style="list-style-type: none"> Toughened paste Ideal for GRP, SMC and dissimilar substrates Low shrinkage 	<ul style="list-style-type: none"> Rapid curing High peel strength Multi purpose 	<ul style="list-style-type: none"> Good sanding properties Ideal for bonding thermoplastics 	<ul style="list-style-type: none"> Gap filling Long open time Resists weathering and humidity Low shrinkage
PROCESSING DATA									
Viscosity (at 73°F)	30k-45k cps	Apr. 80k cps	25k-35k cps	Thixotropic	Thixotropic	Thixotropic	Apr. 45k cps	Apr. 60k cps	Thixotropic
Useable life of adhesive (at 73°F)									
<i>In mixer nozzle</i>	1.8 hr	10 min	8 min	1.3 hr	1 hr	40 min	3 min	10 min	45 min
<i>100 g (0.22 lb) of mix</i>	1.5 hr	6 min	5 min	60 min	1 hr	40 min	-	-	60 min
Time required to reach (at 73°F)									
<i>Light handling strength (145 psi)</i>	7 hr	30 min	20 min	4 hr	3 hr	4 hr	8 min	18 min	6 hr
<i>50% of final shear strength</i>	10 hr	3 hr	1 hr	10 hr	5 hr	6 hr	20 min	30 min	20 hr
Time required to reach (at 140°F)									
<i>50% of final shear strength</i>	45 min	20 min	10 min	40 min	20 min	40 min	-	-	60 min
PERFORMANCE DATA									
Lap shear strength on Al substrate	2755 psi	3335 psi	2755 psi	2610 psi	2610 psi	2465 psi	3190 psi	3625 psi	1305 psi
Peel strength on Al substrate	28 pli	34 pli	31 pli	22 pli	17 pli	23 pli	62 pli	22 pli	6 pli
Typical Tg / Max temp giving LSS of 725 psi	113°F / 194°F	104°F / 176°F	104°F / 176°F	113°F / 158°F	185°F / 286°F	149°F / 230°F	149°F / 230°F	113°F / 212°F	140°F / 194°F
Resistance properties									
<i>Chemical</i>	○	○	○	●	●	○	○	○	○
<i>Heat</i>	○	○	○	○	●	○	●	○	●
<i>Water</i>	○	○	○	○	●	○	○	○	○
<i>Impact</i>	●	●	○	○	○	○	●	●	○
PACKAGING									
Cartridges									
<i>50 ml</i>	■	■	■	■	■	■	■	■	
<i>200 ml</i>	■	■	■	■	■	■	■	■	
<i>400 ml</i>									■
<i>500 ml</i>									
Working packs (1.8 kg kits) (4 lb kits)	■		■	■	■	■			