

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 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.

• 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

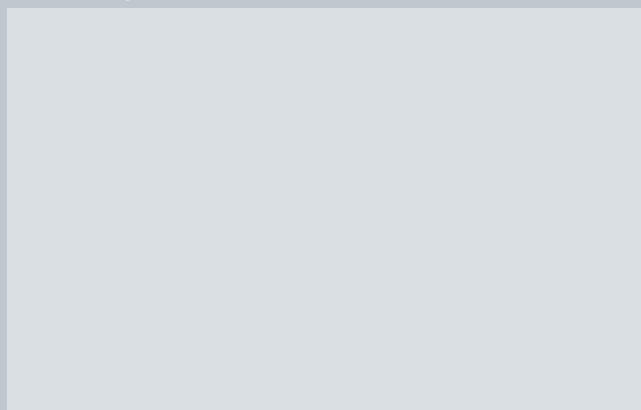
The Araldite® 2000 PLUS range can be used across a vast range of structural engineering applications. Sample case studies from our extensive library available on our website www.araldite2000plus.com.

• 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.



Distributed by



All trademarks mentioned are either property of or licensed to Huntsman Corporation or an affiliate thereof.

Sales of the product described herein ("Product") are subject to the general terms and conditions of sale of either Huntsman Advanced Materials LLC, or its appropriate affiliate including without limitation Huntsman Advanced Materials (Europe) BVBA, Huntsman Advanced Materials Americas Inc., or Huntsman Advanced Materials (Hong Kong) Ltd. ("Huntsman"). The following supercedes Buyer's documents.

While the information and recommendations included in this publication are, to the best of Huntsman's knowledge, accurate as of the date of publication, NOTHING CONTAINED HEREIN IS TO BE CONSTRUED AS A REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHTS, OR WARRANTIES AS TO QUALITY OR CORRESPONDENCE WITH PRIOR DESCRIPTION OR SAMPLE, AND THE BUYER ASSUMES ALL RISK AND LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH PRODUCT, WHETHER USED SINGLY OR IN COMBINATION WITH OTHER SUBSTANCES. No statements or recommendations made herein are to be construed as a representation about the suitability of any Product for the particular application of Buyer or user or as an inducement to infringe any patent or other intellectual property right. Data and results are based on controlled conditions and/or lab work. Buyer is responsible to determine the applicability of such information and recommendations and the suitability of any Product for its own particular purpose, and to ensure that its intended use of the Product does not infringe any intellectual property rights.

The Product may be or become hazardous. Buyer should (i) obtain Material Safety Data Sheets and Technical Data Sheets from Huntsman containing detailed information on Product hazards and toxicity, together with proper shipping, handling and storage procedures for the Product, (ii) take all steps necessary to adequately inform, warn and familiarize its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product of all hazards pertaining to and proper procedures for safe handling, use, storage, transportation and disposal of and exposure to the Product and (iii) comply with and ensure that its employees, agents, direct and indirect customers and contractors who may handle or be exposed to the Product comply with all safety information contained in the applicable Material Safety Data Sheets, Technical Data Sheets or other instructions provided by Huntsman and all applicable laws, regulations and standards relating to the handling, use, storage, distribution and disposal of and exposure to the Product.

Please note that products may differ from country to country. If you have any queries, kindly contact your local Huntsman representative.

© 2007 Huntsman Corporation. All rights reserved.

www.araldite2000plus.com

HUNTSMAN

Enriching lives through innovation

HUNTSMAN

Enriching lives through innovation

EUROPE / AFRICA

Huntsman Advanced Materials
(Switzerland) GmbH
Klybeckstrasse 200
P.O. Box
4002 Basel
Switzerland
Tel +41 61 966 41 20
Fax +41 61 966 35 19

INDIA / MIDDLE EAST

Huntsman Advanced Materials
(India) Pvt. Ltd
5th Floor, Bldg. No. 10
Solitaire Corporate Park
167, Guru Hargovindji Marg, Chakal
Andheri (East)
Mumbai - 400 093
India
Tel +91 22 4095 1556 - 60
Fax +91 22 4095 1300/1400/1500

ASIA / PACIFIC

Huntsman Advanced Materials
(Hong Kong) Ltd
Suites 3 - 12, Level 41
Langham Place
8 Argyle Street
Kowloon
Hong Kong
Tel +852 2148 8800
Fax +852 2424 1741

AMERICAS

Huntsman Advanced Materials
Americas Inc.
10003 Woodlands Forest Drive
The Woodlands
Texas 77381
USA
Tel +1 800 817 8260
Fax +1 281 719 6416

More detailed information about these products can be found on our website: www.araldite2000plus.com

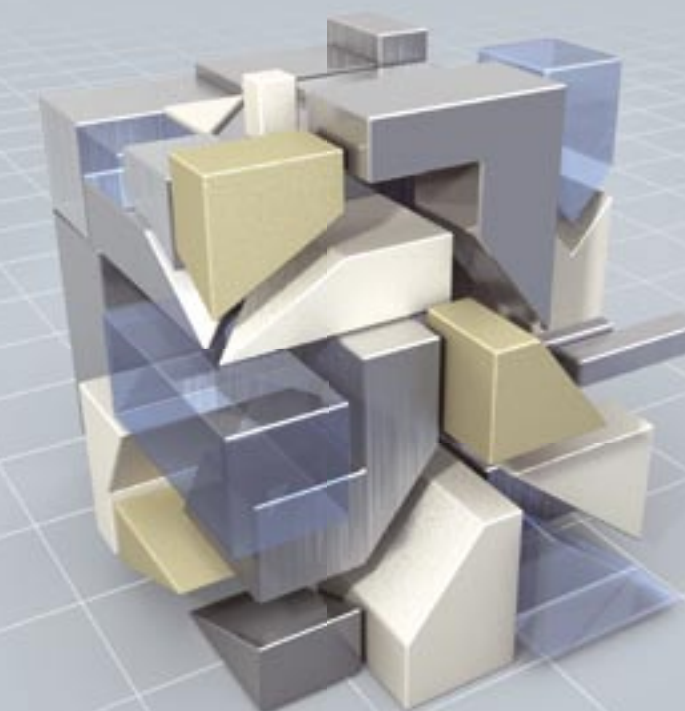
For any other information, please send an e-mail to: araldite2000plus@huntsman.com

Ref.Nr. CCA Araldite2000plus Metals 04.07_EN

Design: www.zygmund.fr

Araldite® 2000+
Strength in bonding

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.



Processing, performance and packaging data

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



	2011	2055	2010-1	2012	2013	2014-1*	2052**	2015	2021	2022	2047**
	Multi purpose	Rigid	Rapid cure		Chemical / temperature resistance			Toughened			
Chemical type	EP	PUR	EP	EP	EP	EP	MMA	EP	MMA	MMA	MMA
Fast curing			■	■			■		■	■	■
Gap filling		■			■	■	■	■	■	■	■

BONDING METALS TO METALS

	2011	2055	2010-1	2012	2013	2014-1*	2052**	2015	2021	2022	2047**
Ferrous metals	●	○	○	●	●	●	●	●	●	●	○
Stainless steel	●	●	●	●	●	●	●	●	●	●	○
Aluminium	●	●	●	●	●	●	●	●	●	●	○
Copper	●	●	●	●	●	●	●	●	●	○	●
Brass	●	○	●	●	●	●	●	●	●	●	●
Zinc / Galvanised metal	●	●	●	○	●	●	○	○	○	●	●

BONDING METALS TO PLASTICS

	2011	2055	2010-1	2012	2013	2014-1*	2052**	2015	2021	2022	2047**
GRP	●	●	○	●	●	●	○	●	●	●	○
CFRP	●	○	●	●	●	●	○	●	●	●	○
SMC	●	●	○	○	●	●	○	●	○	○	○
ABS	●	●	○	○	○	○	●	○	○	●	○
PVC	○	●	○	○	○	○	●	○	●	●	○
PMMA	○	○	○	○	○	○	●	●	●	●	●
Polycarbonate	○	○	○	○	○	○	●	○	●	●	●
Polyamides	●	○	○	○	○	○	○	○	●	○	○

BONDING METALS TO NON-METALS

	2011	2055	2010-1	2012	2013	2014-1*	2052**	2015	2021	2022	2047**
Rubbers	○	○	○	○	○	○	○	○	○	○	○
Glass	○	○	○	○	○	○	○	○	○	○	○
Ceramics	●	○	○	●	●	○	●	○	●	●	○
Wood	●	●	●	●	●	●	○	●	○	○	○

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

Bonding metals

Chemical type	2011	2055	2010-1	2012
EP	●	○	○	○
PUR	○	●	○	○
MMA	○	○	○	○

Product description

PROCESSING DATA

Property	2011	2055	2010-1	2012
Viscosity (at 23°C)	30-45 Pa.s	Thixotropic	Appr. 80 Pa.s	25-35 Pa.s
Useable life of adhesive (at 23°C)				
<i>In mixer nozzle</i>	1.8 hr	45 min	10 min	8 min
<i>100 g of mix</i>	1.5 hr	1 hr	6 min	5 min
Time required to reach (at 23°C)				
<i>Light handling strength (1 MPa)</i>	7 hr	6 hr	30 min	20 min
<i>50% of final shear strength</i>	10 hr	20 hr	3 hr	1 hr
Time required to reach (at 60°C)				
<i>50% of final shear strength</i>	45 min	60 min	20 min	10 min

PERFORMANCE DATA

Property	2011	2055	2010-1	2012
Lap shear strength on Al substrate	19 MPa	9 MPa	23 MPa	19 MPa
Peel strength on Al substrate	5 N/mm	1 N/mm	6 N/mm	5.5 N/mm
Typical Tg / Max temp giving LSS of 5 MPa	45°C / 90°C	60°C / 90°C	40°C / 80°C	40°C / 80°C
Resistance properties				
<i>Chemical</i>	○	○	○	○
<i>Heat</i>	○	○	○	○
<i>Water</i>	○	○	○	○
<i>Impact</i>	●	○	○	○

PACKAGING

Cartridges	2011	2055	2010-1	2012
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 and Araldite® 2052 are currently only registered for use in Europe.