Advanced Materials

HUNTSMAN

THE ADHESIVES YOU NEED NO MATTER YOUR INDUSTRY

Araldite® 2000

The ARALDITE® 2000 Adhesive Core Range gives you the reliability and flexibility to cover 80% of your bonding needs.



MADE POSSIBLE



SIMPLIFY PRODUCTION AND MINIMIZE REPAIRS

At Huntsman Advanced Materials, we make things possible.

Whatever bonding task is in front of you, you can rely on the ARALDITE® 2000 Adhesive Core Range. Whether you need to assemble high-performance products, or make repairs on the fly in tough conditions, these adhesives provide you with safe, straightforward and streamlined bonding solutions, as well as supply security.

The ARALDITE® 2000 Adhesive Core Range includes products which are resistant to impact, high temperatures, water and chemicals. The range also offers a variety of colors, open times, viscosities, and appearances.

STRAIGHTFORWARD

Covering up to 80% of your bonding needs, the ARALDITE® 2000 Adhesive Core Range can simplify your product selection when planning a new project. Using these well-tested adhesives, backed up by our expert development support, you can improve predictability, accelerate time to market and keep your project within budget.



80% Cover up to 80% of your bonding needs

STREAMLINED

Working with this versatile range of products helps you reduce your stock keeping unit (SKU) inventory and simplify your procurement processes. Using these multi-purpose adhesives for a variety of jobs, you can also reduce time spent on worker training.

SECURE SUPPLY

Available through our global network of distributors, choosing the ARALDITE® 2000 Adhesive Core Range allows you to safeguard your production process, reducing your risk of supply chain disruptions and production downtime.



MAXIMIZE YOUR FLEXIBILITY WITH MINIMIZED STOCK

Ideas
MADE POSSIBLE

The ARALDITE® Adhesive Core Range consists of high-performance products within epoxy, acrylic and polyurethane technologies. These adhesives are suitable for use in a wide range of industries and include products with KIWA approval, Lloyd's Register approval and conformity to HL3 requirements, Class R1 and R7, of the Railway European Fire Protection Standard EN 45545-2.

For more specific tasks, Huntsman offers 200+ other specialty adhesives you can rely on for all your bonding needs.

The ARALDITE® 2000 Adhesive Core Range

Two-component epoxy adhesives

ARALDITE® 2011
Versatile and long pot life

ARALDITE® 2012
Versatile and fast curing

ARALDITE® 2014-2
Highly chemical and temperature resistant

ARALDITE® 2015-1
Dynamic load resistant and suitable for dissimilar substrates

ARALDITE® 2019 (AW 4859 / HW 4859)
High-end carbon composites bonding

ARALDITE® 2031-1
Black tough and weathering resistant

Two-component acrylic adhesives

ARALDITE® 2051
Ultra fast assembly in extreme conditions

ARALDITE® 2053 - 05/15
Flexible and fast curing

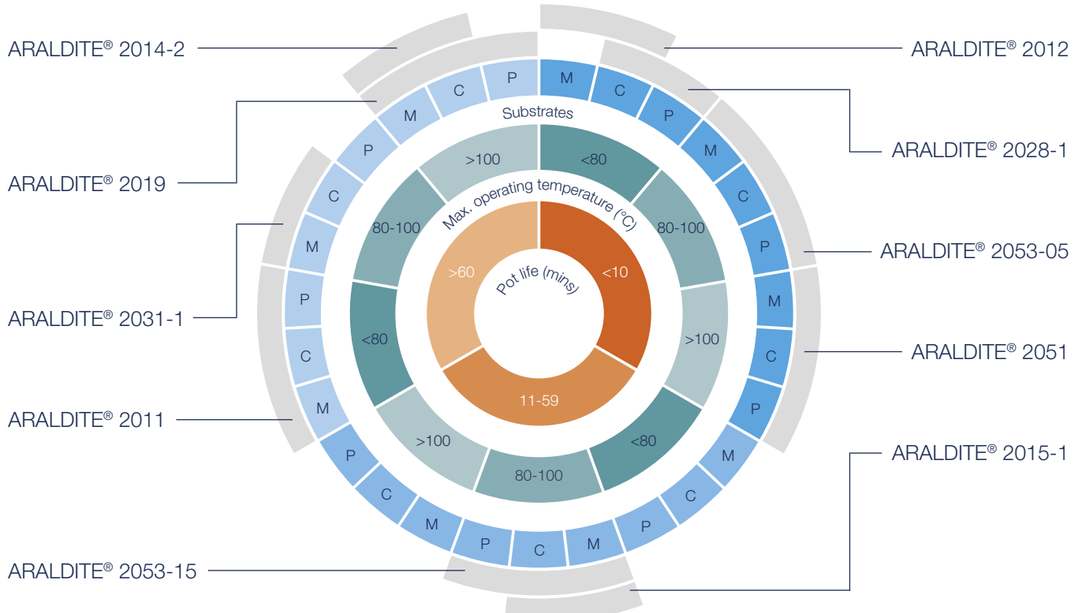
Two-component polyurethane adhesives

ARALDITE® 2028-1
Fast and invisible

FIND THE BEST ADHESIVE FOR YOUR JOB

In this chart, you can identify the product that matches the materials you are bonding, the maximum operating temperature and the pot life you need.

M: Metals
C: Composites
P: Plastics



No matter your industry, ARALDITE® 2000 Adhesive Core Range products enable greater innovation, performance and sustainability.

Bus & Truck



Marine



Rail



Wind



General Industry



SIMULATE AND PREDICT OUTCOMES WITH UP TO 90% SUCCESS

Performance
MADE POSSIBLE

Click to find your material model

With our material models, you get fast and accurate simulations when qualifying adhesives for your project. Based on solid experimental characterization, our material models provide all the information you need regarding physical, mechanical, and thermal behavior, with up to 90% success.

GO TO MARKET FASTER

Get the right data to predict the combined effect of design parameters and adhesives properties over your process and operational conditions. This helps you to reduce lead time for your qualification process, making every new project easier, more productive, and more cost-effective.

High-quality products backed up with technical support

SIMULATION

Predict outcomes with exceptional accuracy using detailed property characterization to support your application simulations.



TESTING

Speed up your qualification process with reliable testing from an independent and ISO-certified laboratory.



PROCESSING

Optimize the cost and efficiency of your processes by ensuring that materials fit your needs.



MAKE YOUR IDEAS A REALITY

Tomorrow
MADE POSSIBLE

CASE 1:

DURABILITY FOR THE LONG HAUL

In the assembly of tractor trailers, ARALDITE® 2053 adhesive helps maintain the physical integrity of large panels by uniformly distributing stress over bonded areas. With no need for drilling, the panels can be finished with a smooth, clean and attractive appearance.

Along with minimal need for pre-treatment of bonded surfaces, ARALDITE® 2053 adhesive offers an optimal open time, which enables a faster production cycle time and increased throughput. With an elongation rate of more than 50%, the resulting bond is durable and reliable, reducing your warranty claims and maintenance demands.



CASE 2:

READY FOR HIGH SPEEDS ON THE WATER

Withstanding cruise speeds up to 99 km/h, ARALDITE® 2015-1 adhesive is an effective solution for high-performance speedboats. Qualified to meet Lloyd's Register specifications, ARALDITE® 2015-1 adhesive allows you to quickly create bonds that last, reducing maintenance costs over the long-term.

With no need for primer, this non-sag adhesive simplifies and expedites the production process. A long open time makes ARALDITE® 2015-1 adhesive a cost-effective solution for bonding mid-sized to large metal and composite parts, including hull-to-deck bonding.





CASE 3:

STURDY BONDS FOR STANDOUT DESIGN

In customer trials, the ARALDITE® 2028-1 adhesive has proven to be the best adhesive able to ensure 100% water- and dust-tight LED pottings behind touch pad keys that will be exposed to tough conditions.

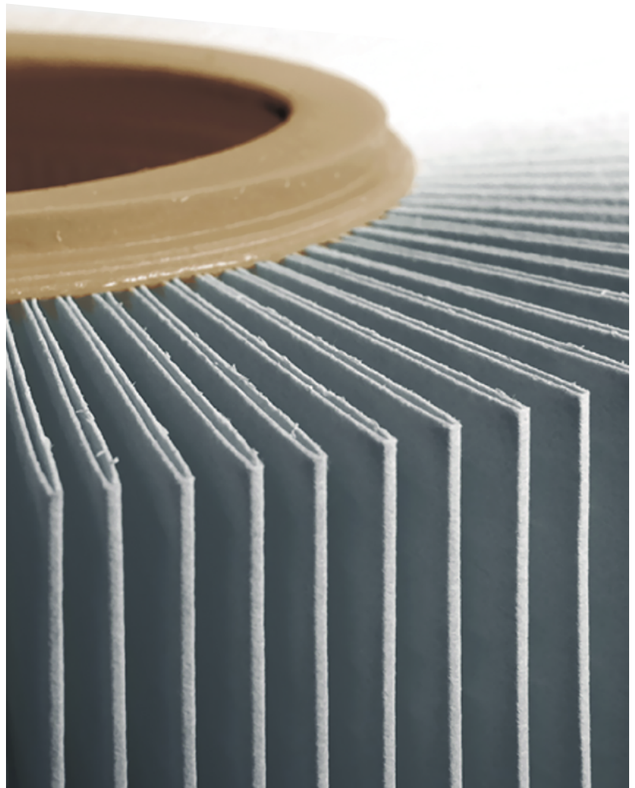
With no need for a vacuum process, this non-foaming adhesive is easy to apply, enabling a fast and highly efficient production cycle. The result is an end product with perfect transparency, allowing LEDs to display multiple colors.

CASE 4:

PRECISE AND EASY PROCESSABILITY

With the non-sag ARALDITE® 2014-2 adhesive, bonding filter media to end caps is simplified. The cartridge format makes it easy to make precisely positioned bonds while the low shrinkage rate allows for tight tolerances.

With good adhesion to various substrates, ARALDITE® 2014-2 adhesive is ideal for bonding dissimilar materials. Curing at room temperature, a reliable and long-lasting bond is created with resistance to hydraulic oils and temperatures up to 140°C.



CASE 5:

FAST ASSEMBLY IN EXTREME CONDITIONS

Approved for a variety of wind blade applications, including bonding internal structure add-ons such as sensors, the versatile ARALDITE® 2051 adhesive offers outstanding adhesion on dissimilar substrates with virtually no need for surface preparation.

With the power to bond in harsh outdoor conditions, combined with a high lap shear strength, this adhesive is perfectly suited to bond small interior parts.

Thanks to its reliable, long-term bonding capability, ARALDITE® 2051 adhesive can help reduce maintenance costs by up to 70% over time.



ARALDITE® 2000
ADHESIVE CORE RANGE

PERFORMANCE DATA

Adhesive	Chemistry	Color	Mixed viscosity at RT	Pot life	Fixture time*	Processing temperature	Max operating temperature**	Elongation at break	Tensile modulus
Unit			Pa.s	mins	mins	℃	℃	%	MPa
ARALDITE®2011	Epoxy	Pale yellow	40	100	420	10 - 40	90	9	1 900
ARALDITE® 2012	Epoxy	Yelllow	30	6	20	10 - 40	70	4	2 500
ARALDITE® 2014-2	Epoxy	Dark gray	Thixotropic	110	300	10 - 40	140	1	3 100
ARALDITE® 2015-1	Epoxy	Beige	Thixotropic	45	240	10 - 40	100	4	1 600
ARALDITE® 2019 (AW 4859 / HW 4859)	Epoxy	Black	Thixotropic	110	270	10 - 40	140	4	1 600
ARALDITE® 2031-1	Epoxy	Black	Thixotropic	60	180	10 - 40	100	12	1 000
ARALDITE® 2051	Acrylic	Pale yellow	Thixotropic	5	15	0 - 40	120	10	1 700
ARALDITE® 2053 - 05/15	Acrylic	Dark gray	Thixotropic	5/15	20/40	10 - 40	100	>50	1 000
ARALDITE® 2028-1	Polyurethane	Transparent	10	6	30	10 - 40	50	60	16

Registered for **REACH** All ARALDITE® 2000 Adhesive Core Range products are REACH compliant

* Time to reach a lap shear strength of 1 MPa

** For the maximum continuous operating temperature, we consider the maximum temperature for which the residual lap shear strength is 1/3 of the lap shear strength at room temperature or the temperature for which the residual lap shear strength is 5 MPa.

ADHERENCE TO SPECIFIC SUBSTRATES

Adhesive	Metals							Thermosets composites				Thermoplastics					Various substrates			
	Mild steel	Stainless steel	Galvanized steel	Aluminum	Copper	Bras	Ferrite	GRP (UP)	GRP (EP)	CFRP	SMC	PVC	PA	ABS, ASA, SAN	PC	PMMA	Ceramic	Glass	Rubber	Wood
ARALDITE®2011	••	••	••	••	••	••	•	••	••	••	•		•	••	•		••	••	••	••
ARALDITE® 2012	••	••		••	••	••	•	••	••	••	•	•		•	•		••	••		••
ARALDITE® 2014-2	••	••		••	••	••	•	••	••	•	•	•		•			•	••	•	••
ARALDITE® 2015-1	••	••	•	••	••	••	•	••	••	••	•	•		•	•	•		••	•	••
ARALDITE® 2019 (AW 4859 / HW 4859)	••	••	••	••	••	••	•	••	••	••	••	••		•	•	•	••	••		••
ARALDITE® 2031-1	••	••	••	••	••	••	•	••	••	••	••		•	•			••	••	•	••
ARALDITE® 2051	••	••	••	••	•	•	••	••	••	••	•	••		••	••	••	••	•		•
ARALDITE® 2053 - 05/15	••	••		••	••	••	••	••	••	••	•	••		••	•	••	••	••		
ARALDITE® 2028-1	•	•	•	•				••	••	••	••	••	•	••	••	•	•	••	•	•

• Good
•• Excellent



PRODUCT APPEARANCE AND VISCOSITY

ARALDITE® 2011	ARALDITE® 2012	ARALDITE® 2014-2	ARALDITE® 2015-1	ARALDITE® 2019*	ARALDITE® 2031-1	ARALDITE® 2051	ARALDITE® 2053-05/15	ARALDITE® 2028-1
								

* Former name ARALDITE® AW 4859 / HW 4859

MADE POSSIBLE

HUNTSMAN

Huntsman Advanced Materials

At Huntsman Advanced Materials, we make things possible. Serving many of the world's leading businesses across virtually every industry, we enable greater innovation, performance and sustainability to address global engineering challenges and contribute towards a better quality of life.

Our capabilities in high-performance adhesives and composites, delivered by more than 1,600 associates, support over 2,000 global customers with innovative, tailor-made solutions and more than 1,500 pioneering epoxy, acrylic, phenolic and polyurethane-based polymer products.

We operate synthesis, formulating and production facilities around the world



Distributed by

For more information, please contact us at:
advanced_materials@huntsman.com

For more information
www.huntsman.com/advanced_materials
advanced_materials@huntsman.com

Europe, Middle East & Africa
Huntsman Advanced Materials (Switzerland) GmbH
Klybeckstrasse 200
P.O. Box
4002 Basel
Switzerland
Tel: +41 61 299 1111
Fax: +41 61 299 1112

Asia Pacific
Huntsman Advanced Materials
(Guangdong) Co., Ltd,
Shanghai Branch Office
455 Wenjing Road, Minhang District
Shanghai 200245, P.R. China
Tel: +86 21 3357 6588
Fax: +86 21 3357 6547

Americas
Huntsman Advanced Materials Americas Inc.
10003 Woodloch Forest Drive
The Woodlands
Texas 77380
USA
Tel: +1 888 564 9318
Fax: +1 281 719 4047

Legal information
All trademarks mentioned are either property of or licensed to Huntsman Corporation or an affiliate thereof in one or more, but not all, countries.

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. or Huntsman Advanced Materials (Guangdong) 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, NONINFRINGEMENT 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 in direct 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.

© 2021 Huntsman Corporation. All rights reserved.

Ref. No. AdMat_Adhesives core range_EN_EU_April 2021

Responsible Care®
OUR COMMITMENT TO SUSTAINABILITY

Registered for REACH

Concept and design by www.cbc.dk