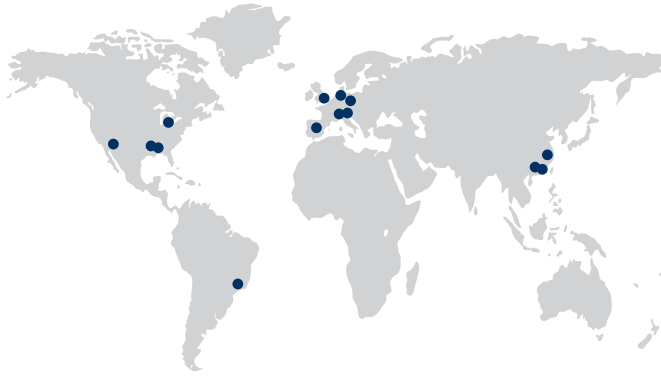


Huntsman Advanced Materials

Our Advanced Materials division is a leading global chemical solutions provider with a long heritage of pioneering technologically advanced epoxy, acrylic, phenolic and polyurethane-based polymer products.

Our capabilities in high-performance adhesives and composites, delivered by more than 1600 associates, serve over 2000 global customers with innovative, tailor-made solutions and more than 1500 products which address global engineering challenges.

We operate synthesis, formulating and production facilities around the world



Distributed by



Find the right product to fulfill your needs



www.aralditeadhesives.com

HUNTSMAN

Enriching lives through innovation

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 & India
Huntsman Advanced Materials (Guangdong) Co., Ltd.
Room 4903-4906, Maxdo Centre,
8 Xing Yi Road,
Shanghai 200336,
P.R.China
Tel. + 86 21 2325 7888
Fax + 86 21 2325 7808

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, 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.

© 2019 Huntsman Corporation. All rights reserved.
Ref. No. Void fillers for aerospace industry 09.19_EN_EU



Registered for
REACH

Advanced Materials

HUNTSMAN

Enriching lives through innovation

Product selection - Europe

Void fillers for the aerospace industry

Product	Mix ratio	Consistency	Gel time	Suggested cure schedule	Max service temperature	Compressive strength	Density	Color	Flame retardant	Packaging					OEM specifications
Conditions		23°C	23°C			23°C				Cartridges	Kits	Seamless®	Bulk	Pallets	
Units	pbw		min	°C	°C	MPa									

Low density ↑	Two-component	High density ↓	Product	Mix ratio	Consistency	Gel time	Suggested cure schedule	Max service temperature	Compressive strength	Density	Color	Flame retardant	Packaging					OEM specifications
			Conditions		23°C	23°C			23°C					Cartridges	Kits	Seamless®	Bulk	Pallets
			Units	pbw		min	°C	°C	MPa									
			Epocast® 1645 A/B	100 : 100	Paste	65 (100 g)	1 - 3 days at 23°C or gel at 23°C + 1 - 3h at 50°C	175	20	0.48	Brown	●	●					GE EMPIS A15 B218 A1
			Araldite® 1641 A/B	100 : 30.5	Soft paste	Work life: 180 (50 g)	1 day at 23°C + 2h at 100°C	- Typical service temperature: 90°C	15	0.50	Pale blue				●	●		Rolls-Royce MSRR 1076
			Araldite® 1644 A/B	100 : 20	Paste	Work life: 35 (200 g)	1 - 1,5 days at 23°C or 3 - 4h at 23°C + 2h at 60 - 80°C	- Typical service temperature: 80°C	30	0.55	Pale green					●		Airbus AIMS 10-03-001
			Epocast® 1626 A/B	100 : 29	Paste	60 (50 g)	7 days at 23°C or 2h at 70°C	-	-	0.65	Brown			●	●			Boeing BMS 5-28, Type 26, Class 1 / Bell 299-947-097, Type 5
			Araldite® 252-1 A/B	100 : 30	Paste	120	7 days at 23°C or 2h at 70°C	- Typical service temperature: 80°C	45	0.75	Blue or white	●				●		Airbus ASNA 4072 ind.B / Airbus AIMS 10-03-005
			Epocast® 1648 A/B	100 : 20	Paste	18 (60 g)	3 days at 23°C or gel at 23°C + 5h at 50°C	-	50	0.70	Off-white	●			●			Boeing BMS 5-28, Type 18
			Epocast® 1649-1 A/B	100 : 50	Paste	10	3 days at 23°C or 3h at 50°C	-	40	0.70	Light blue	●	●					Huntsman standard certification
			Epocast® 1617 A/B	100 : 20	Paste	60-90 (60 g)	7 days at 23°C or 2h at 50°C	-	40	0.70	Off-white	●						Boeing BMS 5-28, Type 17 / Rohr RMS 027, Type 5, Class 3, SCO 036 / Bombardier SMS 41, Type 3 / Alenia MDL08055 / Gamesa GMS 124047 / Kaman CMS-007-4 / Piaggio NP190112, Type 17
			Epocast® 1618 D/B	100 : 14	Paste	15 (55 g)	7 days at 23°C or 5h at 50°C	-	35	0.70	Off-white	●			●			Boeing BMS 5-28, Type 18, Class 1
			Epocast® 1619 A/B	100 : 25	Semi-paste	20-50 (60 g)	7 days at 23°C or 5h at 50°C	-	40	0.70	Off-white	●	●					Boeing BMS 5-28, Type 19
			Epocast® 1633 A/B	100 : 50	Paste	5-12 (75 g)	3 days at 23°C or 5h at 50°C or 2h at 65°C	-	45	0.73	Light blue (available in different colors)	●	●					Boeing BMS 5-28, Type 18, Class 2
			Epocast® 1656 A/B	100 : 12	Paste	50-90 (100 g)	7 days at 23°C or 2-3h at 65°C	175	55	0.80	Light tan				●			Grumman GM 4006, Type 1, Class B, FM 1 / Vought VM 4006, Type 1, Class D, FM1, AM 2 / Pratt and Whitney CPW 505
			Epocast® 1652 A/B	100 : 12	Paste	30-60 (100 g)	7 days at 23°C or 2-3h at 65°C	175	55	0.80	Light tan				●	●		Grumman GM 4006, Type 1, Class B, FM 1 / Sikorsky SS-9587, (-003A) Type 2, Class 1 / Embraer MEP 10-051, Type 2, Class 1 / Gulfstream GMS 4005, Type 1, Class B, FM 1 / Allied Signal PCS 5606 / Hurel-Hispano HS/DFO-010
			Epocast® 89537 A/B	100 : 18,5	Pourable	70 (60 g)	7 days at 23°C or 1h at 175°C	175	60	0.90	Grey	●			●			Airbus I+D-N-200 - Z18.115-2 / Boeing BMS 5-28, Type 7, Class 2 / Lockheed Martin STM M1069 / Alenia MDL8027, Type 7
			CG 1305 A/B	100 : 20	Pourable	> 60 (60 g)	7 days at 23°C or 1h at 175°C	175	62	0.90	Off-white	●			●			Boeing BMS 5-28, Type 7, Class 1 / Alenia MDL8027, Type 7 / Spirit SMS-116201, Type 1
			Epocast® 1511 A/B	100 : 15	Paste	Work life: 40 - 60 (50 g)	24h at 23°C or gel at 23°C + 5h at 50°C	-	70	1.25	Grey				●			Boeing BMS 5-28, Type 3
			Epocast® 1636 A/B	100 : 8	Pourable	120 (55 g)	7 days at 23°C or 1h at 175°C	175	100	1.72	Grey	●			●			Boeing BMS 5-28, Type 6 / Gulfstream GMS 4005, Type 1, Class C, FM 2 / Kaman CMS-007-3
			Epocast® 1635 A/B	100 : 23	Soft paste	> 60 (60 g)	7 days at 23°C or 2.5h at 95°C	175	100	1.80	Blue-Grey		●	●				Boeing BMS 5-28, Type 31

Low density ↑	One-component	High density ↓	Product	Mix ratio	Consistency	Gel time	Suggested cure schedule	Max service temperature	Compressive strength	Density	Color	Flame retardant	Packaging					OEM specifications
			Conditions		23°C	23°C			23°C						Cartridges	Kits	Seamless®	Bulk
			Units	pbw		min	°C	°C	MPa									
			Epocast® 1610-A1	Premixed	Non-flow paste	30 days after thaw	1h at 125°C	-	15	0.50	Off-white	●			●			Boeing BMS 5-28, Type 10
			Epocast® 1614-A1	Premixed	Extrudable paste	8h after thaw	1h at 175°C or 1.5h at 120°C	175	100	0.75	Red-brown	●	●				●	For complete list see list «Aerospace products by specifications»
			Epocast® 1614-A2	Premixed	Extrudable paste	Work life: 24h	1h at 175°C or 1.5h at 120°C	175	125	< 0.75	Reddish-brown	●	●				●	GE EMPIS A15 B205 (GE A15B205D1) / Grumman ACS-MRS-5601
			Epocast® 938-A2	Premixed	Extrudable paste	18h after thaw (100 g)	1h at 175°C or 1.5h at 120°C	175	150	< 1.4	Off-white	●	●					Boeing BMS 5-28, Type 12, Class 1 & 2 / Boeing BMS 5-28, Type 13 / Vought VM 4006, Type 3, Class B, FM 1, AM 2 / Grumman GM 4006, Type 3, Class B, FM1
			Epocast® 927-1	Premixed	Extrudable paste	Work life: 24h after thaw	1h at 175°C or 1.5h at 120°C	175	125	1.15	Off-white		●					Goodrich RMS 027, Type XV, SCO 036
			Epocast® 1627-2	Premixed	Extrudable paste	24h after thaw	1h at 175°C	175	200	1.80	Grey		●			●		Boeing BMS 5-28, Type 27 / Airbus Coasa RP1021209