

**HUNTSMAN**

Enriching lives through innovation

## Advanced Materials

# MRO Materials for the Aerospace Industry

Selector Guide

**KRAYDEN, INC.**

AUTHORIZED DISTRIBUTOR  
1-800-448-0406



## Typical Properties

	Approximate Mixed Viscosity	Mix Ratio, R:H, by vol	Pot Life	Peel Strength PLI (units)	Lap Shear Strength, AL, psi	Flame Retardant	Cure Schedule	Color	Approximate Time-to-Handle	OEM Specifications	Comments/Features
<b>Fast Epoxy Adhesives</b>											
Araldite® 2012	30,000	1:1	7 mins	Not Determined	2,600	No	1 hr at 77°F	Pale yellow	20 mins	Huntsman Standard Certification	Fast reacting, room-temperature cure, multi-purpose structural adhesive with a moderate viscosity providing high strength and toughness. It is suitable for bonding a wide variety of metals, ceramics, glass, rubbers, rigid plastics, and most other materials.
Araldite® Fusion	Self leveling	1:1	90 sec	Not Determined	3,100	No	2 hrs at 77°F	Pale yellow	10 mins	Huntsman Standard Certification	Fast-reacting, room-temperature cure adhesive, that sets in 90 seconds. Strong, chemical and oil resistant, weather and temperature resistant. Quick and easy-to-use. Suitable for bonding ceramics, wood, chipboard, leather, rubber, masonry, concrete, metal, glass, fabrics and hard plastics.
Epibond® 1559-1 A/B	Semi-paste	1:1	4-10 mins	Not Determined	2,700	Yes	24 hrs at 77°F or 30 min at 160°F	Light gray	10 mins	Huntsman Standard Certification	Flame retardant, fast-setting epoxy adhesive that develops handling strength in 10 minutes even at cold temperatures and cures to the touch after 1 hour at 77°F (25°C). For floor panels and other interior parts that must comply with FAR 25.853.
Fastweld™ 10 A/B	160,000	1:1	3-4 mins	Not Determined	2,800	No	4 hrs at 77°F	Gray	20 mins	Huntsman Standard Certification	Rapid-setting epoxy adhesive offering a convenient one-to-one mix ratio by volume or by weight. Develops strong bonds within a short time. Particularly suitable for bonding small parts and for repair work.

<b>Epoxy Adhesives</b>											
Araldite® 1570-FST A/B	Paste	1:1	140 mins	Not Determined	2,600	Yes	48 hrs at 73°F	Dark Gray	Not Determined	Huntsman Standard Certification	Halogen-free epoxy adhesive designed for aerospace applications requiring flame-retardant properties. Particularly suitable for PE foam to phenolic GRP bonding in cargo areas. Meets FAR 25.853(a) & (a-1), AIMS 10-04-006, and AITM 3.0005.
Araldite® 2011	45,000	1:1	10 mins	45 R*	2,700	No	12 hrs at 77°F	Pale Yellow	30 mins	Huntsman Standard Certification	Room-temperature cure, multi-purpose structural adhesive that exhibits high strength and toughness. Suitable for bonding a wide variety of metals, ceramics, glass, rubber, rigid plastics and most other materials.
Araldite® 2014	Thixotropic	2:1	60 mins	17 R*	2,700	No	7 days at 77°F or 30 mins at 176°F	Dark Gray	180 mins	Huntsman Standard Certification	Room-temperature cure, structural adhesive that exhibits high strength with good environmental and chemical resistance. Used for bonding metals, electronic components, GRP structures and applications that may be exposed to high service temperatures or aggressive environments. Low out-gassing properties make this adhesive particularly suitable for specialized electronic telecommunications and aerospace applications.
Epibond® 420 A/B	Semi-paste	2:1	60 mins	33 B*	4,500	No	7 days at 77°F or 1 hr at 250°F	Blue-green	5 hrs	Boeing BMS 5-107 Cl 1	Room-temperature cure, highly versatile epoxy adhesive which is suitable for a wide variety of metal, honeycomb and composite bonding applications where exceptional toughness and resilience are required.

<b>Polyurethane Adhesives</b>											
Uralane® 5774 A/C	Semi-paste	2:1	15-25 mins	35 T*	2,200	Yes	7 days at 77°F or 1-2 hrs at 200°F	Beige	4 hrs	Boeing BMS 5-105 Ty 5 / Heath Tecna HMS A4-001 Ty 1 Cl 2 / Navy NWC78A151 / Gulfstream GAA100BN1	Flame retardant polyurethane adhesive that can be handled after only four hours at room temperature. Produces tough, impact-resistant bonds on "hard-to-join" thermoplastics and on metal substrates.
Uralane® 5779 A/B	Non-sag paste	1:1	8-15 mins	10 T*	1,200	No	7 days at 75°F or 4 hrs at 150°F	White	Not Determined	Boeing BMS 5-105 Ty 6 / Heath Tecna HMS A4-001 Ty 1 Cl 3	UV stable, polyurethane adhesive paste for caulking and sealing "tough-to-join" plastics and metal substrates.

	Approximate Mixed Viscosity	Mix Ratio, R:H, by weight	Gel Time	Compressive Strength, psi	Density, grams/cc	Flame Retardant	Cure Schedule	Color	OEM Specifications	Comments/Features
<b>Epoxy Laminates &amp; Repair Compounds</b>										
Epibond® 156 A/B	Soft Paste	100:6	20 - 50 mins (100g mass)	15,000	1.50	No	3 days at 77°F or gel at room temp + 1 to 3 hrs at 150°F	White	Huntsman Standard Certification	Epoxy paste compound developed primarily for smoothing the porous surfaces of plastics, wood or metal. Good adhesion, low shrinkage, and can be easily applied with a spatula, splining tools or polyethylene squeegees. This system is ideal as a "wipe-on" surface pore filler for laminated composite structures such as radomes, edge joints, surfaces or polystyrene foam.
Epocast® 50-A1/9816	2,400	100:14	65 mins (100 gr mass)	>45,000	1.18	Yes	5 days at 77°F or 2 hrs at 170°-200°F	Amber	Boeing BMS 8-201 Ty III / Embraer MEP 22-011	Flame retardant, unfilled epoxy with a 65-minute gel time. Suitable for filament winding applications and composite structures repairs.
Epocast® 50-A1/946	2,400	100:14	20 mins (100 gr mass)	>45,000	1.18	Yes	5 days at 77°F or 2 hrs at 170°-200°F	Amber	BMS 8-201 Ty IV / Embraer MEP 22-011	Flame retardant, unfilled epoxy laminating system for the manufacture and repair of composite structures and for filament winding applications.
Epocast® 52 A/B	5,500	100:41	65 mins (100 gr mass)	Not Determined	1.10	No	3 hrs at 150°F or 2 hrs at 200°F	Blue	Airbus IPS 08-01-002-01 Iss 1 / Adam Air S-00-040-36 Ty 1 / Eurocopter ECS 0049 Part 1 / SAE Aero AMS 2980	High-temperature, moderate-viscosity epoxy laminating system with good hot/wet strength and excellent resistance to aircraft fluids and moisture. Cures quickly at temperatures between 150°F (65°C) and 200°F (93°C).

<b>Epoxy Syntactics</b>										
Epocast® 1618 D/B	Paste	100:14	15 mins (57 gram mass)	5,000	0.70	Yes	7 days at room temp or 5 hrs at 125°F	White	Boeing BMS 5-28 Ty 18 Cl 1	Flame retardant, room-temperature cure, low-flow, extrudable epoxy syntactic with good compressive strength. Suitable for insert potting in honeycomb structures.
Epocast® 1619 A/B	Semi-paste	100:25	20-50 mins (50 gram mass)	5,500	0.70	Yes	7 days at room temp or 5 hrs at 125°F	Off-white	Boeing BMS 5-28 Ty 19	Flame retardant epoxy syntactic that can withstand exposure to water, fungus and most aircraft fluids. Suitable for insert potting.
Epocast® 1628 A/B	Extrudable paste	100:25	65 mins (60 gram mass)	2,800	0.50	Yes	7 days at room temp or 5 hrs at 125°F	Pale yellow	Boeing BMS 5-28 Ty 28	Trowellable and extrudable epoxy paste with good compressive strength that can be sanded or machined after a room-temperature cure. Used for honeycomb edge filling and core reinforcing.
Epocast® 1629 A/B	Paste	100:50	70 mins (75 gram mass)	3,000	0.48	Yes	7 days at room temp or 5 hrs at 125°F	Light tan	Boeing BMS 5-28 Ty 9 / Mistubishi M1074 Ty 2 / Raytheon BS 23818 Cl 1 Ty 1	Flame retardant, easy-to-spread epoxy paste with good slump resistance. Readily sandable and machinable after curing. Used for edge filling and core reinforcement of honeycomb.
Epocast® 1652 A/B	Semi-paste	100:12	30-60 mins (100 gram mass)	8,000	0.80	No	7 days at 77°F or 2-3 hrs at 150°F	Light tan	Grumman GM 4006 Ty 1 Cl B FM1 / Sikorsky SS9587 (-003A T2) / Embraer MEP 10-051 / Gulfstream GMS 4005 Ty 1 CLB / Allied PCS5606 / HUREL-Hispano HS/DFO-010	Room-temperature curable, high-strength epoxy syntactic with good elevated temperature performance capabilities. Used for core filling and splicing honeycomb composite structures.

\*R = Roller peel test, T = T peel test, B = Bell peel test

## About Huntsman Advanced Materials

Huntsman Advanced Materials is a leading global supplier of synthetic and formulated polymer systems for aerospace customers requiring high-performance materials which outperform the properties, functionality and durability of those traditionally offered. Over 2,300 associates at 13 locations worldwide work to fulfill this promise every day.

We enjoy a long heritage of pioneering technological excellence and offer a unique and wide range of innovative and tailor-made solutions to more than 9,000 customers in over 90 different countries.

## MRO Market for Aerospace

Huntsman Advanced Materials is a leading global supplier of advanced, high-performance materials for the maintenance, repair and overhaul of interior and exterior aircraft components. For more than 60 years, leading aerospace OEMs, MROs, FBOs and subcontractors have turned to Huntsman Advanced Materials for innovations in adhesives, laminating systems and syntactics. Our most popular brands include **Araldite®**, **Epibond®**, **Fastweld™** and **Uralane®** adhesives, as well as **Epocast®** laminates and syntactic materials.

Many of our materials are qualified to Boeing, Airbus, Spirit, Bombardier, Embraer, Sikorsky, Bell, C&D Zodiac, Heath Techna, Goodrich, ROHR and other OEM specifications and are included in Structural Repair Manuals and Service Bulletins.

## Global Presence – 13 Manufacturing Sites



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### For More Information

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