

ADVANCED MATERIALS SOLUTIONS FOR ADVANCED AIR MOBILITY (AAM)

Proven and specified aerospace materials that support sustainability, optimize production and adapt to the evolving needs of next generation AAM vehicles.



MADE POSSIBLE

THE FUTURE MOVES DIFFERENTLY WITH ADVANCED MATERIALS

Our high-performance materials are built for the unique challenges of Advanced Air Mobility (AAM). They offer exceptional strength, lightweight performance, and proven reliability. From structural composite parts to fast-paced bonding, our solutions help reduce vehicle weight, boost safety, and optimize production.

By partnering with us, you can leverage products that are currently listed on commercial and defense specifications, enabling you to get off the ground faster.

Let's elevate advanced air mobility with materials engineered for tomorrow's skies.

Structural Bonding Adhesives

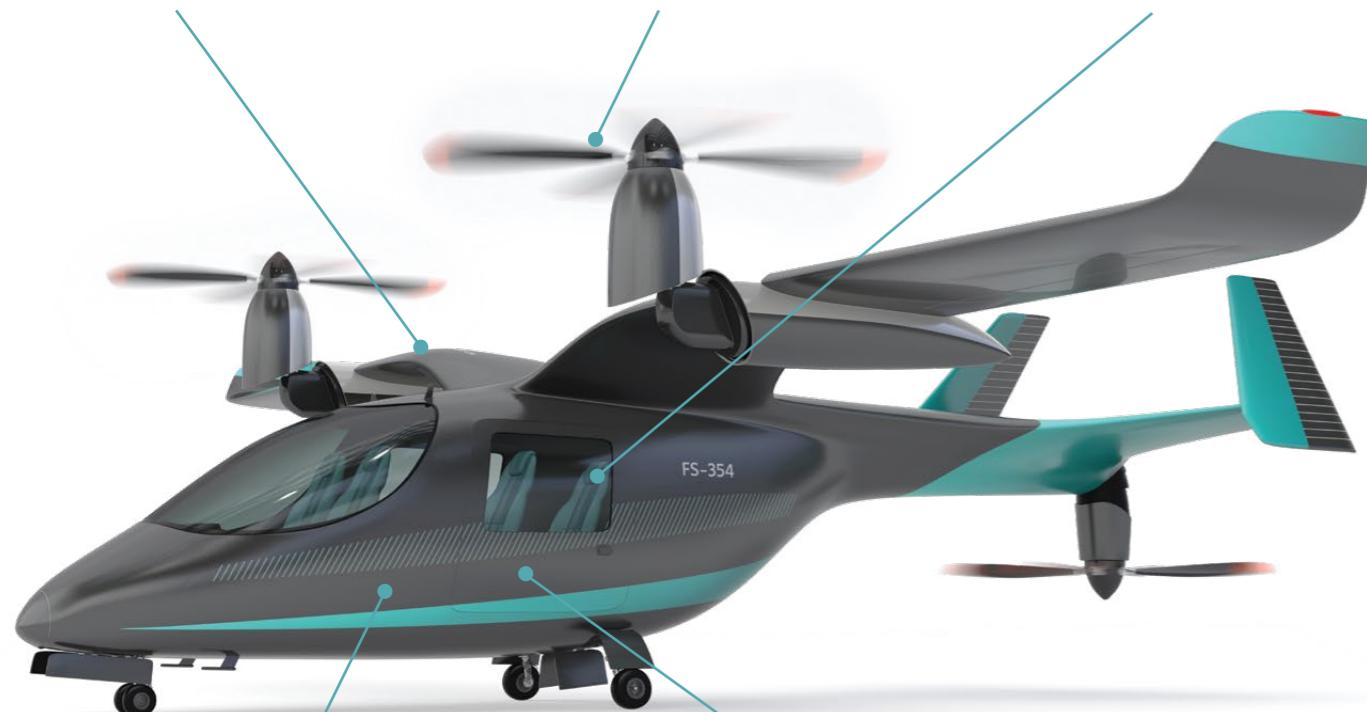
EPIBOND® 115, EPIBOND® 315

Rotor Blades Systems

ARALDITE® LY 1564 /
ARADUR® 2954

Interiors Adhesives

URALANE® 5779-1
EPOCAST® 1645
EPOCAST® 1649-1



E-Motors Systems
ARALDITE® CW 30334 /
ARADUR® HW 30335

Electrically Conductive Adhesives
EPIBOND® 315M

ADHESIVES

Huntsman formulated adhesives allow weight reduction by up to 75% when compared to mechanical fasteners.

	Product Name	Key performance value	Application	Gel time	Density	Max service temperature	Lap Shear at 77°F
Structural Adhesives	EPIBOND® 115	Highly toughened, liquid shim applications	Larger structural parts	180 mins	1.12 g/cm³	300°F / 149°C	4740 psi
	EPIBOND® 315	High temp, quick curing, high compressive strength, low outgassing, liquid shim applications	Medium to small structural parts	45-60 mins	1.35 g/cm³	400°F / 204°C	5500 psi
Interior Adhesives	EPOCAST® 1645	1:1 mix ratio, sandable within 2-3 hours	Core reinforcement Edge-fill/sealing	65 mins	0.46 g/cm³	350°F / 178°C	1100 psi
	EPOCAST® 1649-1	Quick cure, color mix indicator and pumpable for automated dispensing	Edge-fill/sealing, insert & ditch potting	10 mins	0.74 g/cm³	-	1800 psi
	URALANE® 5779-1	Fast setting, non flow paste, 1:1 mix ratio, stable under UV light	Thermoplastic and metal bonding/sealant	10 mins	1.42 g/cm³	180°F / 82°C	1650 psi

COMPOSITE INFUSION SYSTEMS

Designed for both prototyping and scalable production, these systems deliver excellent processability, mechanical performance, and manufacturing flexibility.

Product Name	Key performance value	Viscosity at processing temp (cP)	Latency Processing Temp (hours)	Cure Temp / time	Dry / Wet Tg	Fracture toughness K1C (MPa·m) / G1C (J/m²)	Compression after impact (CAI) (ksi)
ARALDITE® LY 1564 / ARALDITE® 2954	Versatile system with excellent processability	230 at 40°C	1 hr	2hr at 80°C / 2hr at 120°C	130 / 123	0.73 / 226	31

POTTING & ENCAPSULATION SYSTEM

Designed for vacuum casting processes, this epoxy resin system enables 6x higher thermal conductivity compared to unfilled resins, optimal coil impregnation, and enhanced resistance to thermal cycling.

Product Name	Key performance value	Application & Processing	Thermal Conductivity	Mix viscosity at 80°C	Thermal Class	Glass transition temperature (Tg)
ARALDITE® CW 30334 / ARALDITE® HW 30335	Hot curing, excellent thermal properties, low viscosity, high latency and impregnation capability	eMotors and stators Vacuum Casting	1,2 W/mK	1.500 mPa.s	H	100°C

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 1600 associates, support over 2000 global customers with innovative, tailor-made solutions and more than 1500 pioneering epoxy, acrylic, phenolic and polyurethane-based polymer products.

We operate synthesis,
formulating and production
facilities around the world



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Huntsman warrants only that its products meet the specifications agreed in the sales contract. It is the responsibility of the user to determine the suitability of any product for its own particular purpose.

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