# AEROSPACE

# **TAKE OFF IN STYLE**

Aerospace applications place high demands on product performance and safety. For over a quarter of a century, aerospace industry manufacturers have relied on Americhem Engineered Compounds (AEC) to meet their performance thermoplastic needs. AEC can solve your design challenges. We provide custom colored materials for harmonizing the interior of the aircraft such as soft touch materials with just the right haptics and reinforced high-heat materials to address the demands of structural applications.

# **SAFETY IS OUR #1 PRIORITY**

AEC compounds are fully compliant to the requirements of FAA regulation FAR25.853a and FAR25.853d. Our product offering includes compounds that meet FAA requirements for OSU heat release rate, smoke density, and toxic gas emissions. Americhem's globally positioned and quality certified manufacturing locations ensure efficient supply to customers across the globe with just some of the following regulatory compliances:

• FAR25.853 • ISO 10993 • REACH RoHS

Our highly engineered compounds are available globally with low minimum order quantity requirements and come with complete technical support and FAA property declaration.

### FLY WITH CONFIDENCE IN AMERICHEM'S PERFORMANCE ENGINEEERED COMPOUNDS

Our long running supplier history to the aerospace market lends the knowledge required for manufacturing optimized solutions and a reliable supply of materials. AEC has specialized expertise in polymeric chemistry, structural re-enforcement, flame retardant technology, and Federal Aviation regulations. This combination of service, technology, and experience can assist you in developing the ideal polymeric product for your aerospace needs such as:

- Interior soft touch areas
- Seating components Galley
- Lavatory

Avionics

• Personal service units

- Brackets

- O2 systems
- Rub rails

**AEC PRODUCT OFFERINGS** 

We offer customized resins to meet your specific needs on color, strength, ductility, and flame/smoke/toxicity performance. Our extensive product offerings cover all standard aircraft thermoplastics; PAEK, PEEK, PEK, PEI, PPSU, PESU, PSU, PPS, PPA, PC, ABS, PA's. Specific polymer grades are suitable for injection-molding, extrusion, additive manufacturing, and thermoplastic composite pre-peg production.

- Custom color compounds
- Glass and carbon-fiber reinforced engineering polymers
- Weight reduction
- High temperature resistance
- Antimicrobial
- Flame retardant technology
- Electrically active compounds
- Light diffusion / transmitting formulations for LED lighting applications

• Lighting

Internally lubricated compounds for moving parts and reduced wear





AEROSPACE		FAR 25.853				OEM
	Engineered Compounds	12 Second Vertical Burn	60 Second Vertical Burn	NBS Smoke Density	OSU Heat Release (65/65)	Smoke Toxicity
ColorFast <sup>™</sup> Engineering Compounds	SFT Fully Compliant Proprietary Alloys flame, smoke & toxicity compliant alloy	pass	pass	pass	pass	pass
	FRPC flame retardant, hi-impact polycarbonate	pass	—	pass	_	pass
	FRPCABS flame retardant polycarbonate / ABS	pass	—	—	—	pass
	FRABS flame retardant ABS	pass		—		pass
	<b>Polyamides</b> flame retardant PA66, PA12, etc.	pass	—	pass	—	pass
	PES / PPS / PSU polysulfones	pass		pass	_	pass
	PPSU polyphenylsulphone	pass	pass	pass	pass	pass
	FRTPU thermoplastic polyurethane	pass		pass		pass
	PAEK / PEEK / PEKK keytone based polymers	pass	pass	pass	pass	pass
InStruc <sup>™</sup> Structurally Reinforced	<b>PEIGF / PEI CF</b> polyetherimide, glass / carbon fiber reinforced	pass	pass	pass	pass	pass
	<b>PPSUGF</b> polyphenylsulphone, glass reinforced	pass	pass	pass	pass	pass
	<b>PEEKCF / PEEK GF</b> polyethetherketone, glass / carbon fiber reinforced	pass	pass	pass	pass	pass
	<b>PAEK GF / PAEK CF</b> polyaryletherketone, glass / carbon fiber reinforced	pass	pass	pass	pass	pass
	PCGF polycarbonate, glass reinforced	pass	pass	pass	_	pass
	PA66GF polyamide 66, glass reinforced	pass	—	pass	_	pass
	PARAGF polyarylamide, glass reinforced	pass	_	_	_	_

### **COLORFAST<sup>™</sup> PRECOLORED ENGINEERING RESINS**

Adding color to your designs has never been easier than with Americhem's ColorFast<sup>®</sup> pre-colored engineering resins. Whether you are looking to boost your brand identity or differentiate your products, ColorFast<sup>™</sup> is intended to provide you with shorter lead times and precise color matches.

### **INSTRUC<sup>™</sup> STRUCTURALLY REINFORCED COMPOUNDS**

Whether you are working with high temperatures, high load or just need a wear resistant plastic to boost the durability of your products, Americhem's glass and carbon fiber reinforced technologies can help you achieve significant improvements.





World Headquarters • 2000 Americhem Way • Cuyahoga Falls, OH 44221 • Tel: +1.330.929.4213 • www.americhem.com Americhem Engineered Compounds • 20 Progress Drive • Morrisville, PA 19067 • Tel: +1.215.736.1126