



## Plastics Help Innovative Ideas Take Off.

### ROYALITE®

From seats and trays to bulkheads, window shades, lavatory parts, galley carts and flooring there are a lot of essential parts that go into the interior of an aircraft. Spartech meets all these design challenges with Royalite aerospace-rated thermoplastic sheet. The available materials compliant with FAR 25.853(i), FAR 25.853(ii), FAR 25.853(b) and FAR 25.853(d) aviation ratings are R52, R57, R60, and R503.

### KEY CHARACTERISTICS

- High tensile strength and stiffness for superior impact resistance
- Excellent formability, hot tear strength, ductility and ability to maintain uniform wall thickness
- Resists staining, fading, cracking and crazing caused by harsh cleansers
- Meets heat deflection temperature requirements
- Available in 0.028"– 0.375" thickness
- Choose from a variety of popular surface textures, colors and printed patterns

- Antimicrobial protection is available
- Ideal for laminating, fabricating and machining everything from seat parts and bulkhead laminates to monitor shrouds, window shades and tray tables
- UV decorative printed patterns enhance the appearance of the parts

### POLYCAST® – SHEET AND ROD & TUBE

**Polycast Acrylic Sheet adhering to Military Material Specifications MIL-PRF-5425, MIL-PRF-8184, MIL-PRF-25690, and ASTM 4802 / LP391 for Aerospace applications including dust covers for windows, aircraft canopies, cabin windows, and lenses also available.**

Parts for precision equipment such as a site glass or reservoir for a fluid in an avionics system are machined using Polycast acrylic tubes. If specifications such as the inside diameter of the part are critical, the tight tolerances maintained using the cell casting process will deliver parts with the required specifications.

**Call 800-677-4338 or email [marketing@spartech.com](mailto:marketing@spartech.com) to order these products.**

FOLLOW US:

**ROYALITE FLAME AND SMOKE RATED SHEET**

| PRODUCT | MATERIAL    | DESCRIPTION/APPLICATIONS   | SPECIFICATIONS   |
|---------|-------------|--|--|
| R503    | TPR         | Fire-rated TPR flexible sheet<br><b>Applications:</b> Aircraft interior, aircraft flooring   | Passes: FAR 25.853 (a)(ii) @ 0.120"  |
| R52     | PVC/Acrylic | Fire-rated PVC/Acrylic rigid sheet<br><b>Applications:</b> Medical and electronic components and enclosures; aircraft cabin and seat components; mass transit; building and construction | Listed: UL 94 V-0 @ 0.027"<br>Listed: UL 94-5VA @ 0.051"<br>Passes: FAR 25.853 (a)(i) @ 0.040"<br>Class A: ASTM E84 @ 0.028", bonded |
| R57     | PVC/ABS     | Fire-rated PVC/ABS rigid sheet<br><b>Applications:</b> Aircraft cabin and seat components  | Passes: FAR 25.853 (a)(i) @ 0.047"   |
| R60     | PVC/Acrylic | Fire-rated PVC/Acrylic rigid sheet<br><b>Applications:</b> Aircraft cabin and seat components  | Passes: FAR 25.853 (a)(i) @ 0.040"   |

**POLYCAST ACRYLIC SHEET**

| PRODUCT   | MATERIAL          | DESCRIPTION/APPLICATIONS  | SPECIFICATIONS                             |
|-----------|-------------------|---|--|
| Poly A    | Cast Acrylic      | Standard unshrunk acrylic, available in clear and transparent colors<br><b>Applications:</b> Non-critical glazing for commercial helicopters and sport planes   | ASTM D4802, LP-391                         |
| SAR       | Cast Acrylic      | Super abrasion resistant acrylic sheet with polysilicate coating, 45x abrasion resistance of uncoated acrylic, half the weight of glass, transparent, translucent, opaque colors available<br><b>Applications:</b> Dust covers for windows                                  | ASTM 4802, LP-391                          |
| Poly II   | Cast Acrylic      | Heat-resistant, preshrunk, clear, and colored acrylic sheet<br><b>Applications:</b> Dust covers for windows, aircraft transparencies, illuminated cockpit panels  | MIL-PRF-5425                               |
| Poly 76   | Cast Acrylic      | A crosslinked, preshrunk acrylic with excellent resistance to crazing, solvent attacks and dimensional change<br><b>Applications:</b> Monolithic windscreens, outer laminates, canopies   | MIL-PRF-8184, Type I and II and Class 1    |
| Poly 84   | Cast Acrylic      | A uniquely formulated, crosslinked, preshrunk acrylic. With lower water absorption, it is specifically designed to provide superior craze and solvent resistance for today's changing environment<br><b>Applications:</b> Monolithic windscreens, outer laminates, canopies | MIL-PRF-8184, Type I and II, Class 1 and 2 |
| Poly 2000 | Stretched Acrylic | Cross-linked, preshrunk, stretched acrylic sheet with superior craze and solvent resistance<br><b>Applications:</b> Monolithic windscreens, outer laminates, canopies, cabin windows  | MIL-PRF-25690                              |

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