POLYVANTIS

PRODUCT DATASHEET

ULTEM™ 1668A SHEET

DESCRIPTION

ULTEM™ 1668A sheet is an extruded polyetherimide sheet used for aircraft interior applications. 1668A sheet meets many commercial aircraft interior requirements including an OSU heat release rate below 65/65, as well as FAA NBS smoke and flammability testing criteria. The material may be thermoformed, pressure formed, twin sheet formed or used in flat or cold formed applications. Information on stain and chemical resistance, processing and secondary operations is available upon request.

TYPICAL PROPERTY VALUES

PROPERTY	TEST METHOD	UNITS	VALUE
PHYSICAL			
Density	ISO 1183	g/cm²	1.26-1.33
Water absorption, equilibrium, 23°C	ISO 62	%	0.70
MECHANICAL			
Tensile Strength @Yield	ISO 527	MPa	90
Tensile Strength @Break	ISO 527	MPa	76
Tensile modulus	ISO 527	MPa	2300
Tensile elongation, break	ISO 527	%	35
Flexural Strength	ISO 178	MPa	140
Flexural Modulus	ISO 178	MPa	3200
Dynatup, Impact strength, 23°C	ASTM D3763	J	68
Izod Notched Impact			
Nothed, 23°C	ISO 180/ 1A	J/m	74
Unnothed, 23°C	ISO 180/ 1C		NB
Gardner impact strength, 23°C	ASTM D3029	J	36
THERMAL			
Coefficient of Thermal Expansion	ASTM D 696	1/°C	5.10^{-5}
Heat Deflection temperature			
1.82 MPa	ISO 75/Ae	°C	189
0.45 MPa	ISO 75/Be	°C	202
Flammability[1]			
OSU (heat release) 55/55	CS 25.853(d)	kW/m²	Compliant 1.2-3.5mm
Smoke density & Toxicity	FAR 25.583(a)+App.F	-	Pass 1.2-3.5mm
Vertical Burn, 60 s	FAR 25.583(a)+App.F	-	Pass 1.2-3.5mm
ATS 1000	-	-	Pass

[1] This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.

Chemical Resistance

ULTEM™ 1668A sheet is resistant to a broad range of solvents and chemical detergents, including most common automotive and aircraft fluids (skydrol excluded). While being resistant to a broad range of chemicals 1668A sheet is attacked by chlorinated solvents and ketones.

PRODUCT AVAILABILITY

Product code:	1668xxA
Gauges:	1.2, 1.5, 2, 3 & 3.2 mm
Standard size:	1250 x 2050mm
Textures:	Deep velvet / smooth texture (166829A – 1668A)
Colors:	71024 (light gray), 71025 (dark gray), 71051 (mid gray) & 8156 (Ivory)

Minimum Order Quantity:	250 kgs per color
Max weight per pallet:	250 kgs

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