

## Description

Ultem\* 1668 A ( 29) sheet is an extruded polyetherimide sheet material used for aircraft interior applications. Ultem 1668A (29) 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	Unit	Value
<b>Physical</b>			
Density	ISO 1183	g/cm <sup>3</sup>	1.26-1.33
Water Absorption, equilibrium, 23° C	ISO 62	%	0.70
<b>Mechanical</b>			
Tensile Strength, yield	ISO 527	MPa	90
Break		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			
Notched, 23°C	ISO 180/1A	J/m	74
Unnotched, 23°C	ISO 180/1C		no break
Gardner Impact Strength, 23°C	ASTM D3029	J	36
<b>Thermal</b>			
Coeff. of Thermal Expansion	ASTM D696	1/°C	5.10 <sup>-5</sup>
Heat Deflection Temperature			
1.82 MPa	ISO 75/Ae	°C	189
0.45 MPa	ISO 75/Be	°C	202
<b>Flammability#)</b>			
OSU Heat Release Rate @ 3.5 W/cm <sup>2</sup>	OSUHRC		
@ 2 min		kw-min/m <sup>2</sup>	<50
@ Peak		kw-m <sup>2</sup>	<60
NBS Smoke, Flaming Mode	ASTM E662	-	
Ds, 4 min			<100
FAA Flammability @ 1 to 6.35 mm	FAR 25.853/ BSS 7230	-	Pass
ATS 1000	-	-	Pass

#) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions. Note: Reported values based on 3.2 mm gauge thickness

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## Chemical Resistance

Ultem\* 1668A (29) 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 Ultem 1668 A (29) sheet is attacked by chlorinated solvents and ketones.

## Product Availability

**Standard gauges:** 1.20 mm, 1.50 mm, 2.00 mm, 3.00 mm

**Textures:** Deep suede matt/smooth (29-texture)

**Colors:** Custom colors

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