

Ultem* 2300

Ultem* 2300 is an extruded 30% glass reinforced polyetherimide. It is an amorphous, high-performance polymer with exceptional flame and heat resistance. It performs continuously to 340°F (171°C), making it ideal for high strength/high heat applications, and those requiring consistent dielectric properties over a wide frequency range. It is hydrolysis resistant, highly resistant to acidic solutions and capable of withstanding multiple autoclaving cycles.

Ultem 2300 provides greater rigidity and improved dimensional stability while maintaining many of the useful characteristics of unfilled Ultem. Ultem commonly is machined into parts for reusable medical devices, analytical instrumentation, electrical/electronic insulators and a variety of structural components requiring high strength and rigidity at elevated temperatures.

Property	Method	Unit	Value
Mechanical			
Specific Gravity, 73°F	D792		1.51
Tensile Strength, 73°F	D638	psi	17,000
Tensile Modulus of Elasticity, 73°F	D638	psi	800,000
Elongation, 73°F	D638	%	3.0
Flexural Strength, 73°F	D790	psi	30,000
Flexural Modulus, 73°F	D790	psi	900,000
Compressive Strength, 10% Def., 73°F	D695	psi	32,000
Compressive Modulus of Elasticity, 73°F	D695	psi	625,000
Hardness, Rockwell, Scale as noted, 73°F	D785		M114 (R127)
Hardness, Durometer, Shore D scale, 73°F	D2240		D86
Izod Impact (notched), 73°F	D256 Type A	ft-lb/in	1.0
Limiting PV, 73°F	PTM55007	psi-fpm	1,000
Thermal			
Coefficient of linear Thermal Expansion	E-831(TMA)	in/in/°F	1.10 x 10 ⁻⁵
Deflection Temperature 264 psi	D648	°F	410
Tg-Glass Transition (amorphous)	D3418	°F	419
Continuous Service Temperature in Air (Max.)		°F	340
Thermal Conductivity		BTU-in/(hr-ft ² °F)	1.56
Electrical			
Dielectric Strength, Short Term	D149(2)	Volts/mil	770
Surface Resistivity	EOS/ESD S11.11	Ohm/square	>10 ¹³
Dielectric Constant, 10 ⁶ Hz	D150(2)		3.70
Dissipation Factor, 10 ⁶ Hz	D150(2)		0.001

For additional information about our products call 1-800-366-0300 or via e-mail at select.support@qplas.com

All statements, technical information and recommendations contained in this publication are presented good faith, based upon tests believed to be reliable and practical field experience. The reader is cautioned, however, that Quadrant EPP cannot guarantee the accuracy or completeness of this information, and it is the customer's responsibility to determine the suitability of Quadrant EPP's products in any given application. Fluorosint, Nylatron, Ertalyte, Acetron, MC and Techtron are all registered trademarks of Quadrant EPP. Delrin and Teflon are registered trademarks of E. I. DuPont, Torlon - Solvay Advanced Polymers, Ultem-GE Plastics.

Product Data Sheet



Ultem* 2300

Property	Method	Unit	Value
Chemical			
Acids, Weak, 73°F/23°C, acetic acid, dilute hydrochloric or sulfuric			Acceptable Service
Acids, Strong, 73°F/23°C, conc. hydrochloric or sulfuric			Unacceptable
Alkalies, Weak, 73°F/23°C, dilute ammonia or sodium hydroxide			Acceptable Service
Alkalies, Strong, 73°F/23°C, conc. ammonia or sodium hydroxide			Unacceptable
Hydrocarbons-Aromatic, 73°F/23°C, benzene, toluene			Unacceptable
Hydrocarbons-Aliphatic, 73°F/23°C, gasoline, hexane, grease			Limited Service
Ketones, Esters, 73°F/23°C, acetone, methyl ethyl ketone			Unacceptable
Ethers, 73°F/23°C, diethyl ether, tetrahydrofuran			Acceptable Service
Chlorinated Solvents, 73°F/23°C, methylene chloride, chloroform			Unacceptable
Alcohols, 73°F/23°C, methanol, ethanol, anti-freeze			Acceptable Service
Inorganic Salt Solutions, 73°F/23°C, sodium chloride, potassium cyanate			Acceptable Service
Continuous Sunlight, 73°F/23°C			Acceptable Service
Miscellaneous			
Water Absorption Immersion, 24 hr	D570	%	0.18
Water Absorption Immersion, Sat.	D570	%	0.90
Outgassing TML (Total Mass Loss)	E595	%	0.50
CVCM (Collected Volatile Condensable Material)	E595	%	0.00
WVR(Water Vapor Regained)	E595	%	0.30
Compliance			
UL94			V-0

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