

Product Texts

30% Glass fiber filled, standard flow Polyetherimide (Tg 217°C). ECO Conforming, UL94 V0 and 5VA listing. NSF 51 listing, WRAS certification, KTW certification in recognized colors.

UL Yellow Card Link [E121562-470961](https://www.ulprospector.com/usa/2022/01/15/2022-01-15-UL-2300-PEI-GF30)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	6	cm ³ /10min	ISO 1133
Temperature	360	°C	-
Load	5	kg	-
ASTM Data			
Melt Flow Index, MFI	5	g/10min	ASTM D 1238
Temperature	337	°C	-
Load	6.6	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	10500	MPa	ISO 527
Stress at break	175	MPa	ISO 527
Strain at break	2.4	%	ISO 527
Flexural modulus, 23°C	9600	MPa	ISO 178
Charpy impact strength, +23°C	40	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	40	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	10	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	40	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C	10	kJ/m ²	ISO 180/1A
Izod notched impact strength	10	kJ/m ²	ISO 180/1A
Temperature	-30	°C	-
Rockwell hardness	M 110	-	ISO 2039-2
Ball indentation hardness	165	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	10400	MPa	ASTM D 638
Tensile Strength at Yield	168	MPa	ASTM D 638
Tensile Strength at Break	175	MPa	ASTM D 638
Elongation at Break	2.5	%	ASTM D 638
Flexural Modulus	9700	MPa	ASTM D 790
Rockwell Hardness	M 114	-	ASTM D 785
Izod Impact notched, 1/8 in	90	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	80	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	600	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	210	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	215	°C	ISO 75-1/-2
Vicat softening temperature, A	225	°C	ISO 306
Vicat softening temperature, B	213	°C	ISO 306
Coeff. of linear therm. expansion, parallel	18	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	48	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.2	mm	-
Yellow Card available	yes	-	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	1.2	mm	-
Yellow Card available	yes	-	-
Oxygen index	50	%	ISO 4589-1/-2
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12

ULTEM™ Resin 2300

PEI-GF30

Saudi Basic Industries Corporation (SABIC)

GWFI - thickness tested (2)	2	mm	-
Glow Wire Ignition Temperature (GWIT)	900	°C	IEC 60695-2-13
GWIT - thickness tested (2)	2	mm	-
ASTM Data			
Coefficient of Thermal Expansion, MD	19	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	41	E-6/K	ASTM D 696
DTUL @ 66 psi	215	°C	ASTM D 648
DTUL @ 264 psi	211	°C	ASTM D 648
Vicat Temperature	227	°C	ASTM D 1525

Electrical properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 1MHz	3.4	-	IEC 62631-2-1
Dissipation factor, 1MHz	23	E-4	IEC 62631-2-1
Volume resistivity	1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	>1E15	Ohm	IEC 62631-3-2
Electric strength	35	kV/mm	IEC 60243-1
Comparative tracking index	150	-	IEC 60112
ASTM Data			
Dielectric Strength, Short Time	30.3	kV/mm	ASTM D 149
Volume Resistivity	3E16	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.9	%	Sim. to ISO 62
Humidity absorption	0.6	%	Sim. to ISO 62
Density	1510	kg/m ³	ISO 1183
Water Absorption, 24hr	0.16	%	ASTM D 570
Water Absorption, Equilibrium	0.9	%	ASTM D 570
Density	1510	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	150	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.02	%	-
Melt temperature	350 - 410	°C	-
Mold temperature	135 - 180	°C	-
Feed temperature	80 - 120	°C	-
Zone 1	330 - 400	°C	-
Zone 2	340 - 410	°C	-
Zone 3	345 - 420	°C	-
Nozzle temperature	345 - 410	°C	-
Screw speed	40 - 70	rpm	-
Back pressure	0.3 - 0.7	MPa	-

Characteristics**Processing**

Injection Molding

Certifications

Drinking water contact, Drinking water contact KTW, Drinking water contact NSF 61

Applications

Automotive

Regional Availability

North America, Europe, Asia Pacific, South and Central America