

**Product Texts**

PTFE filled, standard flow Polyetherimide (Tg 217C). ECO Conforming, UL 94 V0 and 5VA listing in recognized colors.

UL Yellow Card Link [E121562-221111](https://www.ulprospector.com/usa/Products/PEI/ULTEM-4002)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	13	cm <sup>3</sup> /10min	ISO 1133
Temperature	360	°C	-
Load	5	kg	-
<b>ASTM Data</b>			
Melt Flow Index, MFI	9.5	g/10min	ASTM D 1238
Temperature	337	°C	-
Load	6.6	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	3300	MPa	ISO 527
Yield stress	100	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	80	MPa	ISO 527
Strain at break	25	%	ISO 527
Flexural modulus	3100	MPa	ISO 178
Charpy notched impact strength, +23°C	11	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	10	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	8	kJ/m <sup>2</sup>	ISO 180/1A
<b>ASTM Data</b>			
Tensile Modulus	3460	MPa	ASTM D 638
Tensile Strength at Yield	105	MPa	ASTM D 638
Tensile Strength at Break	85	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	40	%	ASTM D 638
Flexural Modulus	3550	MPa	ASTM D 790
Izod Impact notched, 1/8 in	117	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	120	J/m	ASTM D 256
Temperature	-30	°C	-

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Vicat softening temperature, B	215	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	210	°C	ISO 306
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.4	mm	-
Burning behav. 5V at thickness h	5VA	class	IEC 60695-11-20
Thickness tested	1.9	mm	-
<b>ASTM Data</b>			
DTUL @ 264 psi	197	°C	ASTM D 648
Vicat Temperature	219	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	1.1	%	Sim. to ISO 62
Humidity absorption	0.6	%	Sim. to ISO 62
Density	1330	kg/m <sup>3</sup>	ISO 1183
Density	1330	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	135	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.02	%	-

**ULTEM™ Resin 4002 - Americas**

(PEI+PTFE)

Saudi Basic Industries Corporation (SABIC)

Melt temperature	<b>350 - 370</b>	°C	-
Mold temperature	<b>135 - 165</b>	°C	-
Zone 1	<b>340 - 360</b>	°C	-
Zone 2	<b>345 - 365</b>	°C	-
Zone 3	<b>350 - 370</b>	°C	-
Screw speed	<b>40 - 70</b>	rpm	-
Back pressure	<b>0.3 - 0.7</b>	MPa	-

**Characteristics****Processing**

Injection Molding

**Regional Availability**

North America