

**ULTEM™ Resin DU319**

PEI

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

Transparent Polyetherimide blend with PET resin. Material is RoHS compliant and is also US FDA and EU Food Contact Compliant in recognized colors.

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Melt Flow Index, MFI	8.1	g/10min	ASTM D 1238
Temperature	295	°C	-
Load	6.6	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	3300	MPa	ISO 527
Yield stress	110	MPa	ISO 527
Yield strain	6	%	ISO 527
Stress at break	75	MPa	ISO 527
Strain at break	36	%	ISO 527
Charpy notched impact strength, +23°C	3	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	4	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	4	kJ/m <sup>2</sup>	ISO 180/1A

<b>ASTM Data</b>			
Tensile Modulus	3370	MPa	ASTM D 638
Tensile Strength at Yield	110	MPa	ASTM D 638
Tensile Strength at Break	82	MPa	ASTM D 638
Elongation at Yield	60	%	ASTM D 638
Elongation at Break	60	%	ASTM D 638
Izod Impact notched, 1/8 in	26	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Vicat softening temperature, B	177	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	180	°C	ISO 306
<b>ASTM Data</b>			
Vicat Temperature	181	°C	ASTM D 1525

Other properties	Value	Unit	Test Standard
Water absorption	0.5	%	Sim. to ISO 62
Humidity absorption	0.17	%	Sim. to ISO 62
Density	1300	kg/m <sup>3</sup>	ISO 1183
Density	1290	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120 - 150	°C	-
Pre-drying - Time	4 - 8	h	-
Processing humidity	≤0.02	%	-
Melt temperature	300 - 330	°C	-
Mold temperature	95 - 150	°C	-
Zone 1	280 - 315	°C	-
Zone 2	290 - 320	°C	-
Zone 3	295 - 325	°C	-
Screw speed	50 - 100	rpm	-
Back pressure	0.7 - 1.4	MPa	-

**Characteristics****Processing**

Injection Molding

**Certifications**

Food contact, Food approval FDA 21 CFR, RoHS compliant

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### Special Characteristics

Transparent

### Regional Availability

North America, Europe, Asia Pacific