

# ULTEM™ Resin 9075 - Europe

Polyether Imide  
SABIC

PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

High flow Polyetherimide blend. Meets FAR 25.853 and OSU 65/65 with low toxicity, smoke, and flame evolution. ECO Conforming.

### General

Material Status	• Commercial: Active
Search for UL Yellow Card	• SABIC • ULTEM™ Resin
Availability	• Europe
Uses	• Additive Manufacturing (3D Printing) • Aircraft Interiors • Rail Applications
RoHS Compliance	• RoHS Compliant
Also Available In	• Asia Pacific • Latin America • North America

Physical	Nominal Value Unit	Test Method
Density	1.32 g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (340°C/5.0 kg)	15 cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage - Flow <sup>2</sup>	0.60 to 0.80 %	Internal Method
Water Absorption		ISO 62
Saturation, 23°C	1.3 %	
Equilibrium, 23°C, 50% RH	0.70 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	3200 MPa	ISO 527-2/1
Tensile Stress		ISO 527-2/50
Yield	90.0 MPa	
Break	75.0 MPa	
Tensile Strain		ISO 527-2/50
Yield	6.0 %	
Break	25 %	
Flexural Modulus <sup>3</sup>	3200 MPa	ISO 178
Flexural Stress <sup>3</sup>		ISO 178
-- <sup>4</sup>	130 MPa	
-- <sup>5</sup>	120 MPa	
Taber Abrasion Resistance		Internal Method
1000 g, CS-17 Wheel	15.0 mg	

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength <sup>6</sup>		ISO 179/1eA
-30°C	6.0 kJ/m <sup>2</sup>	
23°C	7.0 kJ/m <sup>2</sup>	
Notched Izod Impact Strength <sup>7</sup>		ISO 180/1A
-30°C	5.0 kJ/m <sup>2</sup>	
23°C	7.0 kJ/m <sup>2</sup>	

Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness (H 358/30)	127 MPa	ISO 2039-1



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Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature <sup>8</sup>		
0.45 MPa, Unannealed, 4.00 mm, 100 mm Span	200 °C	ISO 75-2/Be
1.8 MPa, Unannealed, 4.00 mm, 100 mm Span	185 °C	ISO 75-2/Ae
Vicat Softening Temperature		
--	200 °C	ISO 306/B120 ISO 306/B50
--	210 °C	ISO 306/A50
Ball Pressure Test (123 to 127°C)	Pass	IEC 60695-10-2
CLTE		ISO 11359-2
Flow : 23 to 150°C	5.0E-5 cm/cm/°C	
Transverse : 23 to 150°C	5.0E-5 cm/cm/°C	
Thermal Conductivity	0.26 W/m/K	ISO 8302

Flammability	Nominal Value Unit	Test Method
Flame Rating (1.6 mm, Testing by SABIC)	V-0	UL 94
Glow Wire Flammability Index (3.2 mm)	960 °C	IEC 60695-2-12
OSU Peak Heat Release Rate - 5 minute test	16.0	FAR 25.853
OSU Total Heat Release - 2 minute test	10.0	FAR 25.853

Injection	Nominal Value Unit
Drying Temperature	135 to 145 °C
Drying Time	4.0 to 6.0 hr
Suggested Max Moisture	0.020 %
Suggested Shot Size	40 to 60 %
Hopper Temperature	80 to 120 °C
Rear Temperature	340 to 360 °C
Middle Temperature	345 to 365 °C
Front Temperature	350 to 370 °C
Nozzle Temperature	350 to 370 °C
Processing (Melt) Temp	350 to 370 °C
Mold Temperature	135 to 165 °C
Back Pressure	0.300 to 0.700 MPa
Screw Speed	40 to 70 rpm
Vent Depth	0.025 to 0.076 mm

## Extrusion Notes

### Profile Extrusion Parameters

- Drying Temperature : 130 to 140 °C
- Drying Time : 4 to 6 hrs
- Maximum Moisture Content : 0.02 %
- Melt Temperature : 295 to 330 °C
- Barrel - Zone 1 Temperature : 280 to 300 °C
- Barrel - Zone 2 Temperature : 295 to 320 °C
- Barrel - Zone 3 Temperature : 305 to 330 °C
- Barrel - Zone 4 Temperature : 310 to 335 °C
- Hopper Temperature : 80 to 100 °C
- Adapter Temperature : 285 to 335 °C
- Die Temperature : 275 to 330 °C
- Calibrator Temperature : 140 to 170 °C
- Calibrator 2 Temperature : 90 to 130 °C



**Notes**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Tensile Bar

<sup>3</sup> 2.0 mm/min

<sup>4</sup> at Yield

<sup>5</sup> at Break

<sup>6</sup> 80\*10\*4 sp=62mm

<sup>7</sup> 80\*10\*4 mm

<sup>8</sup> 120\*10\*4 mm



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**Where to Buy**

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**Supplier****SABIC**

**Web:** <http://www.sabic.com/>

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**Distributor****3Polymer (Guangzhou) Chemical Technology Co., Ltd.**

**Telephone:** +86-20-3466-7988

**Web:** <http://3polymer.com>

**Availability:** China

**AECTRA**

**Telephone:** +33-4-72-54-36-42

**Web:** <https://www.aectra.fr/>

**Availability:** Bulgaria, Romania

**AGI-Augusto Guimarães & Irmão**

**Telephone:** +351-22753-7400

**Web:** <https://www.agi.pt/en/>

**Availability:** Portugal

**GRÄSSLIN**

**Telephone:** +49-7721-4040-261

**Web:** <https://www.graesslin-kunststoffe.de>

**Availability:** Germany

**Guzmán Polymers**

**Telephone:** +34-963-992-400

**Web:** <https://www.guzmanglobal.com/en/productos/plastics/>

**Availability:** Italy, Spain, Turkey

**Lenorplastics**

**Telephone:** +41-61-706-11-11

**Web:** <https://www.lenorplastics.ch>

**Availability:** Switzerland

**Plastoplan**

**Telephone:** +43-1-25040-0

**Web:** <https://www.plastoplan.com/>

**Availability:** Austria, Czech Republic, Hungary, Poland, Slovakia

**POLYMIX**

*POLYMIX is a Pan European distribution company. Contact POLYMIX for availability of individual products by country.*

**Telephone:** +33-3-8920-1380

**Web:** <http://www.polymix.eu/>

**Availability:** France

**RESINEX Group**

*RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.*

**Telephone:** +32-14-672511

**Web:** <http://www.resinex.com/>

**Availability:** Europe

**Ultrapolymers**

*Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.*

**Telephone:** +32-11-57-95-57

**Web:** <http://www.ultrapolymers.com/>

**Availability:** Belgium, Netherlands, South Africa

