

NORYL™ 731 resin

Polyphenylene Ether + PS

SABIC Innovative Plastics

Message:

PPE+PS, HDT 125

General Information			
UL YellowCard	E45587-237006	E207780-228539	
Processing Method	Injection molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.08	g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (280°C/5.0 kg)	11	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (280°C/5.0 kg)	12.0	cm ³ /10min	ISO 1133
Molding Shrinkage - Flow (3.20 mm)	0.50 - 0.80	%	Internal method
Water Absorption			ISO 62
23°C, 24 hr	0.13	%	ISO 62
23°C, 24 hr ¹	0.040	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ²	2400	MPa	ASTM D638
--	2100	MPa	ISO 527-2/1
Tensile Strength			
Yield ³	54.0	MPa	ASTM D638
Yield	40.0	MPa	ISO 527-2/50
Fracture ⁴	45.0	MPa	ASTM D638
Fracture	40.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ⁵	4.0	%	ASTM D638
Yield	70	%	ISO 527-2/50
Fracture ⁶	30	%	ASTM D638
Fracture	70	%	ISO 527-2/50
Flexural Modulus			
50.0mm span ⁷	2100	MPa	ASTM D790
-- ⁸	2300	MPa	ISO 178
Flexural Stress			
--	80.0	MPa	ISO 178
Yield, 50.0mm span ⁹	75.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ¹⁰ (23°C)	13	kJ/m ²	ISO 179/1eA

Notched Izod Impact			
-30°C	120	J/m	ASTM D256
23°C	150	J/m	ASTM D256
-30°C ¹¹	11	kJ/m ²	ISO 180/1A
23°C ¹²	16	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			
23°C	800	J/m	ASTM D4812
-30°C ¹³	55	kJ/m ²	ISO 180/1U
23°C ¹⁴	60	kJ/m ²	ISO 180/1U
Instrumented Dart Impact (23°C, Total Energy)	55.0	J	ASTM D3763
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
1.8 MPa, unannealed, 3.20mm	110	°C	ASTM D648
1.8 MPa, unannealed, 6.40mm	124	°C	ASTM D648
1.8 MPa, unannealed, 64.0mm span ¹⁵	112	°C	ISO 75-2/Af
Vicat Softening Temperature			
--	133	°C	ASTM D1525, ISO 306/B50 ¹⁶
--	135	°C	ISO 306/B120
Linear thermal expansion coefficient			
Flow: -40 to 40°C	7.2E-5	cm/cm/°C	ASTM E831
Flow: -40 to 40°C	7.3E-5	cm/cm/°C	ISO 11359-2
Lateral: -40 to 40°C	8.0E-5	cm/cm/°C	ASTM E831
Lateral: -40 to 40°C	8.3E-5	cm/cm/°C	ISO 11359-2
Injection	Nominal Value	Unit	
Drying Temperature	104 - 110	°C	
Drying Time	3.0 - 4.0	hr	
Drying Time, Maximum	8.0	hr	
Suggested Max Moisture	0.020	%	
Suggested Shot Size	30 - 70	%	
Rear Temperature	249 - 299	°C	
Middle Temperature	260 - 304	°C	
Front Temperature	271 - 310	°C	
Nozzle Temperature	282 - 310	°C	
Processing (Melt) Temp	282 - 310	°C	
Mold Temperature	76.7 - 104	°C	
Back Pressure	0.345 - 0.689	MPa	
Screw Speed	20 - 100	rpm	
NOTE			
1.	50% RH		
2.	5.0 mm/min		
3.	Type 1, 50mm/min		

4.	Type 1, 50mm/min
5.	Type 1, 50mm/min
6.	Type 1, 50mm/min
7.	1.3 mm/min
8.	2.0 mm/min
9.	1.3 mm/min
10.	80*10*4 sp=62mm
11.	80*10*4
12.	80*10*4
13.	80*10*4
14.	80*10*4
15.	80*10*4 mm
16.	标准 B (120°C/h), 载荷2 (50N)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT