VALOX™ 420 resin

Polybutylene Terephthalate **SABIC Innovative Plastics**



Technical Data

Product Description		
30% GR, excellent strength, stiffne	ess and dimensional stability. High heat resistance. Appliance handles, spotlights, electric motors, connectors.	
General		
Material Status	Commercial: Active	
Literature ¹	Technical Datasheet	
UL Yellow Card ²	• E121562-220792	
Search for UL Yellow Card	 SABIC Innovative Plastics VALOX™ 	
Availability	North America	
Filler / Reinforcement	Glass Fiber, 30% Filler by Weight	
Features	Good Dimensional StabilityGood StrengthHigh Heat Resistance	
Uses	Appliance Components Connectors Handles	
Processing Method	Injection Molding	
Multi-Point Data	 Coefficient of Thermal Expansion vs. Temperature (ASTM E831) Elastic Modulus vs Temperature (ASTM D4065) Flexural DMA (ASTM D4065) Instrumented Impact (Energy) (ASTM D3763) Instrumented Impact (Load) (ASTM D3763) Pressure-Volume-Temperature (PVT - Zoller Method) Shear DMA (ASTM D4065) Specific Heat vs. Temperature (ASTM D3417) Tensile Creep (ASTM D2990) Tensile Fatigue Tensile Stress vs. Strain (ASTM D638) Thermal Conductivity vs. Temperature (ASTM E1530) Viscosity vs. Shear Rate (ASTM D3835) 	

Physical	Nominal Value Unit	Test Method
Specific Gravity	1.53 g/cm³	ASTM D792
Specific Volume	0.660 cm³/g	ASTM D792
Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)	17 g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (250°C/2.16 kg)	13.0 cm ³ /10min	ISO 1133
Molding Shrinkage		Internal Method
Flow ⁴	0.50 to 0.80 %	
Flow ⁵	0.30 to 0.50 %	
Flow ⁶	0.30 to 0.70 %	
Flow: 3.20 mm	0.30 to 0.80 %	
Across Flow ⁷	0.60 to 0.90 %	
Across Flow ⁵	0.40 to 0.60 %	
Across Flow ⁶	0.50 to 1.0 %	
Across Flow: 3.20 mm	0.50 to 1.0 %	
Water Absorption		
24 hr	0.090 %	ASTM D570
Equilibrium, 23°C, 50% RH	0.080 %	ISO 62
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus		
8	9300 MPa	ASTM D638
	9300 MPa	ISO 527-2/1

Form No. TDS-4725-en

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Tensile Strength	Mechanical	Nominal Value Unit	Test Method
Yield 126 MPa ISO 527-215 Broak β 125 MPa ISO 527-215 Broak β 120 MPa ASTM D638 Break 125 MPa ISO 527-225 Tensile Elongelion Yield β 2.7 % ASTM D638 Yield β 2.0 % ISO 527-225 Break β 2.0 % ISO 527-225 Break β 2.7 % ASTM D638 Break β 2.7 % ASTM D638 Break β 2.0 % ISO 527-225 Flexural Modulus 3.0 mm Span ¹0 7580 MPa ASTM D780 -11 8500 MPa ISO 178 Flexural Stress 11.12 8500 MPa ISO 178 Flexural Stress 11.12 ASTM D780 ASTM D780 Break, 5.0 mm Span ¹0 19.0 mg ASTM D780 Taber Abrasion Resistance 19.0 mg ASTM D780 Taber Abrasion Resistance 19.0 mg ASTM D780 Lohary Violched Impact Strength ¹3 19.0 mg ISO 179/1eA -30° C 45 kJm²² ISO 179/1eA <	Tensile Strength		
Break® Break 120 MPa Break ASTM D638 Break RSO 527-2/5 Tensile Elongelion Yield³ 2.7 % SATM D638 SATM D638 Yield³ 2.0 % ISO 527-2/5 Yield³ 2.0 % ISO 527-2/5 Break³ 2.0 % ISO 527-2/5 Break³ 2.0 % ISO 527-2/5 Break³ ASTM D638 Break 2.0 % ISO 527-2/5 Flexural Modulus 50.0 mm Span ¹0 San MPa ISO 178 ASTM D790 ISO 178 ISO 178 Flexural Stress 1.1 2 San MPa ISO 178 ASTM D790 ISO 178 ISO 178 Flexural Stress 195 MPa ISO 178 ASTM D790 ISO 178 ASTM D790 ISO 178 Televinal Stress 195 MPa ISO 178 ASTM D790 ISO 178 ASTM D790 ISO 178 Televinal Stress 195 MPa ISO 178 ASTM D790 ISO 178 ISO 179/164 ISO 180/14 ISO 180/14 ISO 180/14 ISO 180/14 ISO 180/14 ISO 180		120 MPa	ASTM D638
Break 126 MPa	Yield	125 MPa	ISO 527-2/5
Tensile Elongation	Break ⁹	120 MPa	ASTM D638
Yield 2.7 % ASTM D638 Yield 2.0 % ISO 527-2/5 Break 2.0 % ISO 527-2/5 Flexural Modulus 3.0 % ISO 527-2/5 Flexural Modulus 5.0 nm Span ¹0 7580 MPa ASTM D790 -11 8500 MPa ISO 178 Flexural Stress -11.22 195 MPa ASTM D790 Break, 50.0 nm Span ¹0 195 MPa ASTM D790 Break, 50.0 nm Span ¹0 190 MPa ASTM D790 Taber Abrasion Resistance 19.0 mg ASTM D790 Taber Abrasion Resistance 1000 Cydes. 1000 g, CS-17 Wheel 19.0 mg Impact Nominal Value Unit Test Method Charpy Unnotched Impact Strength ¹3 150 I J/m² ISO 179/1eA -30°C 5.0 kJ/m² 150 I J/m² 23°C 5.0 kJ/m² 150 I J/m² -30°C 85 J/m² ASTM D256 23°C 85 J/m² ASTM D256 23°C 85 J/m² ASTM D256 23°C ¹ 80 J/m² ASTM D256 23°	Break	125 MPa	ISO 527-2/5
Mile	Tensile Elongation		
Break ° 2.7 % ASTM D688 Flexural Modulus 2.0 % ISO 527-2/5 6.0 mm Span ¹0 7560 MPa ASTM D790 -1¹ 8500 MPa ISO 178 Flexural Stress 11,12 195 MPa ISO 178 -10 Med, 50.0 mm Span ¹0 195 MPa ASTM D790 Break, 50.0 mm Span ¹0 190 MPa ASTM D790 Break, 50.0 mm Span ¹0 190 MPa ASTM D1044 1000 Cycles, 1000 g, CS-17 Wheel 19.0 mg ASTM D1044 Impact Nominal Value Unit Test Method Charry Notched Impact Strength ¹3 ISO 179/1eA 30°C -30°C 5.0 kJ/m² ISO 179/1eA -30°C 45 kJ/m² ISO 179/1eA -30°C 80 J/m	Yield ⁹	2.7 %	ASTM D638
Firexar Modulus	Yield	2.0 %	ISO 527-2/5
Flexural Modulus	Break ⁹	2.7 %	ASTM D638
\$6.0 mm Span 10	Break	2.0 %	ISO 527-2/5
South	Flexural Modulus		
—11	50.0 mm Span 10	7580 MPa	ASTM D790
Till 12	·	8500 MPa	ISO 178
Till 12	Flexural Stress		
Yield, 50.0 mm Span 10 195 MPa ASTM D790 Break, 50.0 mm Span 10 190 MPa ASTM D790 Taber Abraisoin Resistance ASTM D790 1000 Cycles, 1000 g, CS-17 Wheel 19.0 mg Impact Nominal Value Unit Test Method Charry Notched Impact Strength 13 ISO 179/1eA -30°C 5.0 k./lm² -30°C 45 k./lm² -30°C 45 k./lm² -30°C 45 k./lm² -30°C 80 J/m -30°C 80 J/m -30°C 85 J/m -30°C 14 7.0 k./lm² -30°C 14 8.0 k//m² -30°C 14 8.0 k//m² -30°C 14 8.0 k//m² -30°C 14 8.0 k//m² -30°C 14 45 k//m² -30°C 14 5 k//m² -30°C 14 5 k//m² -30°C 14 5 k//m² -30°C 14<		195 MPa	ISO 178
Break, 50.0 mm Span ¹0 190 MPa ASTM D1044 Taber Abrasion Resistance 1000 Cycles, 1000 g, CS-17 Wheel 19.0 mg ASTM D1044 Impact Nominal Value Unit Test Method Charpy Notched impact Strength ¹³ 5.0 kJ/m² ISO 179/1eA -30°C 5.0 kJ/m² ISO 179/1eU -30°C 45 kJ/m² ISO 179/1eU -30°C 45 kJ/m² ISO 179/1eU -30°C 45 kJ/m² ISO 180/1eU Notched Izod Impact 80 J/m ASTM D256 -30°C 85 J/m ASTM D256 -30°C 14 7.0 kJ/m² ISO 180/1A -30°C 4 8.0 J/m² ISO 180/1A -30°C 14 8.0 kJ/m² ISO 180/1A 23°C 4 80 J/m ASTM D4812 -30°C 14 9.0 kJ/m² ISO 180/14 23°C 14 45 kJ/m² ISO 180/14 23°C 16 8.0 J ISO 18	Viold 50.0 mm Span 10		
Taber Abrasion Resistance	·		
Impact Nominal Value Unit Test Method Charry Notched Impact Strength ¹³ ISO 179/1eA -30°C 5.0 kJ/m² 23°C 5.0 kJ/m² Charry Unnotched Impact Strength ¹³ ISO 179/1eU -30°C 45 kJ/m² 23°C 45 kJ/m² Notched Izod Impact 80 J/m ASTM D256 23°C 85 J/m ASTM D256 23°C 14 8.0 kJ/m² ISO 180/1A 23°C 23°C 14 8.0 kJ/m² ISO 180/1A 23°C 4 80.0 kJ/m² ISO 180/1A 23°C 14 8.0 kJ/m² ISO 180/1A 23°C 14 8.0 kJ/m² ISO 180/1A 23°C 23°C 14 45 kJ/m² ISO 180/1A 23°C 14 45 kJ/m² ISO 180/1U 1nstrumented Dart Impact 8.00 J/m ASTM D4812 23°C 70 14 45 kJ/m² ISO 180/1U 1nstrumented Dart Impact 8.00 J ASTM D763 23°C, Total Energy 8.00 J ASTM D785 Rockwell Hardness (R-Scale) 118 ISO 2039-2	•	T90 MFa	
Impact		10.0 mg	ASTM D1044
Charpy Notched Impact Strength 13			Toot Mothod
-30°C	<u> </u>	Nominal value of it	
23°C 5.0 kJ/m² Charpy Unnotched Impact Strength 13 ISO 179/1eU -30°C 45 kJ/m² 23°C 45 kJ/m² Notched Izod Impact 80 J/m ASTM D256 -30°C 85 J/m ASTM D256 -30°C 14 7.0 kJ/m² ISO 180/1A 23°C 14 8.0 kJ/m² ISO 180/1A Unnotched Izod Impact 800 J/m ASTM D4812 -30°C 14 45 kJ/m² ISO 180/1U 23°C 4 45 kJ/m² ISO 180/1U 23°C 14 45 kJ/m² ISO 180/1U 1strumented Dart Impact 8.00 J ASTM D3763 23°C 14 45 kJ/m² ISO 180/1U Instrumented Dart Impact 8.00 J ASTM D3763 23°C, Total Energy 8.00 J ASTM D3763 Ball Indentation Hardness (R-Scale) 118 ASTM D586 Rockwell Hardness (R-Scale) 118 ASTM D586 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-2 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-2 B		F 0 k 1/m2	130 179/16A
Charpy Unnotched Impact Strength ¹³ ISO 179/1eU -30°C 45 kJ/m² 23°C 45 kJ/m² Notched Izod Impact 80 J/m ASTM D256 -30°C 85 J/m ASTM D256 23°C ¹⁴ 8.0 kJ/m² ISO 180/1A 23°C ¹⁴ 8.0 kJ/m² ISO 180/1A Unnotched Izod Impact 800 J/m ASTM D4812 23°C ¹⁴ 45 kJ/m² ISO 180/1U 23°C ¹⁴ 45 kJ/m² ISO 180/1U 1strumented Dart Impact ASTM D3763 ASTM D3763 23°C, Total Energy 8.00 J Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D786 Rockwell Hardness (H 358/30) 122 MPa ISO 2039-2 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-1 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 45 kJ/m² ISO 2039-1 0.45 MPa, Unannealed, 6.40 mm 20 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm 20 °C A			
-30°C 45 kJ/m² 23°C		5.0 KJ/M²	180 470/4 611
Notched Izod Impact		45 la 1/2-2	150 179/160
Notched Izod Impact			
-30°C 80 J/m ASTM D256 23°C 85 J/m ASTM D256 -30°C 14 7.0 kJ/m² ISO 180/1A 23°C 14 8.0 kJ/m² ISO 180/1A Unnotched Izod Impact 23°C 800 J/m ASTM D4812 -30°C 14 45 kJ/m² ISO 180/1U 23°C 14 150 ISO 180/1U 23°C 14 150 ISO 180/1U 23°C 150 ISO 180/1U 23°C 150 ISO 180/1U 23°C 150 ISO 180/1U 23°C 150 ISO 2039-1 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) I18 ASTM D785 ISO 2039-2 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-1 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 0.45 MPa, Unannealed, 3.20 mm 220 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm Span 15 217 °C ISO 75-2/Bf 1.8 MPa, Unannealed, 6.40 mm Span 15 217 °C ISO 75-2/Bf 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 203 °C ASTM D648		45 KJ/III-	
23°C 85 J/m ASTM D256 -30°C 14 7.0 kJ/m² ISO 180/1A 23°C 14 8.0 kJ/m² ISO 180/1A Unnotched Izod Impact 23°C 800 J/m ASTM D4812 -30°C 14 45 kJ/m² ISO 180/1U 23°C, 14 45 kJ/m² ISO 180/1U Instrumented Dart Impact ASTM D3763 23°C, Total Energy 8.00 J Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D785 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-2 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-1 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load ASTM D648 0.45 MPa, Unannealed, 3.20 mm 220 °C ASTM D648 0.45 MPa, Unannealed, 64.0 mm 216 °C ASTM D648 1.8 MPa, Unannealed, 64.0 mm 203 °C ASTM D648 1.8 MPa, Unannealed, 64.0 mm 207 °C ASTM D648 1.8 MPa, Unannealed, 64.0 mm 204 °C <td>·</td> <td>90.1/m</td> <td>ASTM DOES</td>	·	90.1/m	ASTM DOES
100 cm 1			
23°C 14 8.0 kJ/m² ISO 180/1A			
Unnotched Izod Impact 23°C 800 J/m ASTM D4812 -30°C 1⁴ 45 kJ/m² ISO 180/1U 23°C 1⁴ 45 kJ/m² ISO 180/1U Instrumented Dart Impact 8.00 J 23°C, Total Energy 8.00 J Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D785 ISO 2039-2 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-1 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 0.45 MPa, Unannealed, 3.20 mm 220 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm 216 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm Span 15 217 °C ISO 75-2/Bf 1.8 MPa, Unannealed, 6.40 mm 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm Span 15 204 °C ISO 75-2/Af Vicat Softening Temperature 215 °C ASTM D1525 16 215 °C ASTM D1525 16 223 °C ISO 306/A50 <td></td> <td></td> <td></td>			
23°C 800 J/m ASTM D4812 -30°C 14 45 kJ/m² ISO 180/1U 23°C 14 45 kJ/m² ISO 180/1U Instrumented Dart Impact ASTM D3763 23°C, Total Energy 8.00 J Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D785 ISO 2039-2 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-1 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load Test Method 0.45 MPa, Unannealed, 3.20 mm 220 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm 216 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm Span 15 217 °C ISO 75-2/Bf 1.8 MPa, Unannealed, 6.40 mm 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm 207 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm 207 °C ASTM D648 Vicat Softening Temperature 215 °C ASTM D1525 16 ***Color Soft Soft Soft Soft Soft Soft Soft Soft		8.0 KJ/m²	ISO 180/1A
-30°C ¹⁴	·	000.1/	4 OTA 1 D 4040
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23°C, Total Energy 8.00 J Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 118 ASTM D785 ISO 2039-2 Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-1 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 220 °C ASTM D648 0.45 MPa, Unannealed, 3.20 mm 216 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm Span 15 217 °C ISO 75-2/Bf 1.8 MPa, Unannealed, 3.20 mm 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm 207 °C ASTM D648 1.8 MPa, Unannealed, 64.0 mm Span 15 204 °C ISO 75-2/Af Vicat Softening Temperature 215 °C ASTM D1525 16 215 °C ASTM D1525 16 1SO 306/A50		45 kJ/m²	
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Ball Indentation Hardness (H 358/30) 122 MPa ISO 2039-1 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load .45 MPa, Unannealed, 3.20 mm 220 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm 216 °C ASTM D648 0.45 MPa, Unannealed, 64.0 mm Span 15 217 °C ISO 75-2/Bf 1.8 MPa, Unannealed, 3.20 mm 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm 207 °C ASTM D648 1.8 MPa, Unannealed, 64.0 mm Span 15 204 °C ISO 75-2/Af Vicat Softening Temperature 215 °C ASTM D1525 16 223 °C ISO 306/A50	Rockwell Hardness (R-Scale)	118	
Thermal Nominal Value Unit Test Method Deflection Temperature Under Load 0.45 MPa, Unannealed, 3.20 mm 220 °C ASTM D648 0.45 MPa, Unannealed, 6.40 mm 216 °C ASTM D648 0.45 MPa, Unannealed, 64.0 mm Span ¹⁵ 217 °C ISO 75-2/Bf 1.8 MPa, Unannealed, 3.20 mm 203 °C ASTM D648 1.8 MPa, Unannealed, 6.40 mm 207 °C ASTM D648 1.8 MPa, Unannealed, 64.0 mm Span ¹⁵ 204 °C ISO 75-2/Af Vicat Softening Temperature 215 °C ASTM D1525 ¹⁶ 223 °C ISO 306/A50	Ball Indentation Hardness (H 358/30)	122 MPa	
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Vicat Softening Temperature 215 °C ASTM D1525 ¹⁶ 223 °C ISO 306/A50		204 °C	
215 °C ASTM D1525 ¹⁶ 223 °C ISO 306/A50	•		
223 °C ISO 306/A50	·	215 °C	ASTM D1525 16
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VALOX™ 420 resin

Polybutylene Terephthalate **SABIC Innovative Plastics**



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Thermal	Nominal Value Unit	Test Method
Ball Pressure Test (125°C)	Pass	IEC 60695-10-2
CLTE		
Flow: -40 to 40°C	2.5E-5 cm/cm/°C	ASTM E831 ISO 11359-2
Flow: 60 to 138°C	2.5E-5 cm/cm/°C	ASTM E831
Transverse : -40 to 40°C	1.2E-4 cm/cm/°C	ASTM E831 ISO 11359-2
Thermal Conductivity	0.19 W/m/K	ISO 8302
RTI Elec	140 °C	UL 746
RTI Imp	140 °C	UL 746
RTI Str	140 °C	UL 746
lectrical	Nominal Value Unit	Test Method
Surface Resistivity	> 1.0E+15 ohms	IEC 60093
Volume Resistivity		
	> 3.2E+16 ohms·cm	ASTM D257
	> 1.0E+15 ohms·cm	IEC 60093
Dielectric Strength		
1.60 mm, in Oil	25 kV/mm	ASTM D149
3.20 mm, in Air	19 kV/mm	ASTM D149
0.800 mm, in Oil	28 kV/mm	IEC 60243-1
1.00 mm ¹⁷	19 kV/mm	IEC 60243-1
1.60 mm, in Oil	24 kV/mm	IEC 60243-1
3.20 mm, in Oil	16 kV/mm	IEC 60243-1
Dielectric Constant		
100 Hz	3.80	ASTM D150
1 MHz	3.70	ASTM D150
50 Hz	3.10	IEC 60250
60 Hz	3.10	IEC 60250
1 MHz	3.10	IEC 60250
Dissipation Factor		
100 Hz	2.0E-3	ASTM D150
1 MHz	0.020	ASTM D150
50 Hz	1.0E-3	IEC 60250
60 Hz	1.0E-3	IEC 60250
100 Hz	1.0E-3	IEC 60250
1 MHz	0.010	IEC 60250
Arc Resistance ¹⁸	PLC 5	ASTM D495
Comparative Tracking Index (CTI)	PLC 0	UL 746
Comparative Tracking Index	300 V	IEC 60112
High Voltage Arc Tracking Rate (HVTR)	PLC 1	UL 746
lammability	Nominal Value Unit	Test Method
Flame Rating (0.8 mm)	НВ	UL 94
Glow Wire Flammability Index (1.0 mm)	750 °C	IEC 60695-2-12
Oxygen Index	19 %	ASTM D2863
dditional Information	Nominal Value Unit	Test Method
Filler Content	30 %	ASTM D229
jection	Nominal Value Unit	
Drying Temperature	121 °C	
Drying Time	3.0 to 4.0 hr	
Drying Time, Maximum	12 hr	
Suggested Max Moisture	0.020 %	
Suggested Shot Size	40 to 80 %	
Rear Temperature	238 to 254 °C	Form No. TDS-47



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Injection	Nominal Value Unit
Middle Temperature	243 to 260 °C
Front Temperature	249 to 266 °C
Nozzle Temperature	243 to 260 °C
Processing (Melt) Temp	249 to 266 °C
Mold Temperature	66 to 88 °C
Back Pressure	0.345 to 0.689 MPa
Screw Speed	50 to 80 rpm
Vent Depth	0.025 to 0.038 mm

Notes

¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.

³ Typical properties: these are not to be construed as specifications.

⁴ 3.2 to 4.6 mm

⁵ 1.5 to 3.2 mm

⁶ Tensile Bar

⁷ 3.2-4.6 mm

⁸ 5.0 mm/min ⁹ Type I, 5.0 mm/min

¹⁰ 1.3 mm/min

¹¹ 2.0 mm/min

¹² Yield

¹³ 80*10*4 sp=62mm

¹⁴ 80*10*4

¹⁵ 80*10*4 mm

¹⁶ Rate B (120°C/h), Loading 2 (50 N)

¹⁷ Short-Time

¹⁸ Tungsten Electrode



Form No. TDS-4725-en

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Where to Buy

Supplier

SABIC Innovative Plastics
Pittsfield, MA USA
Telephone: 800-845-0600
Web: http://www.sabic-ip.com/

Distributor

Nexeo Solutions

Telephone: 888-594-6009

Web: http://www.nexeosolutions.com/

Availability: North America

Reseller

A Reseller is not a distributor authorized by the Supplier.

Guangzhou Huaxiu Plastics Co., Ltd. Telephone: +86-20-82582555 Web: http://www.va-so.com

Availability: China

