Technical Data Sheet

SCHULAFORM® AF 9

Acetal (POM) Copolymer
Engineering Plastics

Product Description		
Aramid fibre filled POM-Compound with improved abrasion resistance		
General		
Filler / Reinforcement	• Aramid Fiber	
Features	• Abrasion Resistant	
Automotive Specifications	• GM QK 000367 Type A Color: Natural	• IMDS ID 17340386 Color: Natural
Processing Method	• Injection Molding	

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.41 g/cm³	1.41 g/cm³	ISO 1183/A
Melt Volume-Flow Rate (MVR) (190°C/2.16 kg)	4.50 cm³/10min	4.50 cm³/10min	ISO 1133
Mechanical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Tensile Modulus	421000 psi	2900 MPa	ISO 527-2/1A/1
Tensile Stress (Yield)	7980 psi	55.0 MPa	ISO 527-2/1A/50
Tensile Strain			
Yield	10 %	10 %	ISO 527-2/1A/50
Break	12 %	12 %	ASTM D638
Impact	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1A
-22°F (-30°C)	1.4 ft·lb/in²	3.0 kJ/m²	
73°F (23°C)	2.4 ft·lb/in²	5.0 kJ/m²	
Charpy Unnotched Impact Strength			ISO 179/1U
-22°F (-30°C)	19 ft·lb/in²	40 kJ/m²	
73°F (23°C)	21 ft·lb/in²	45 kJ/m²	
Notched Izod Impact (0.126 in (3.20 mm))	1.1 ft·lb/in	61 J/m	ASTM D256A
Hardness	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Ball Indentation Hardness (H 132/10)	19100 psi	132 MPa	ISO 2039-1
Thermal	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Heat Deflection Temperature			
66 psi (0.45 MPa), Unannealed	313 °F	156 °C	ISO 75-2/Bf
264 psi (1.8 MPa), Unannealed	212 °F	100 °C	ISO 75-2/Af
Vicat Softening Temperature			
--	325 °F	163 °C	ISO 306/A50
--	297 °F	147 °C	ISO 306/B50
Electrical	**Nominal Value (English)**	**Nominal Value (SI)**	**Test Method**
Surface Resistivity	> 1.0E+15 ohms	> 1.0E+15 ohms	IEC 60093
Volume Resistivity	> 1.0E+13 ohms·m	> 1.0E+13 ohms·m	IEC 62631-3-1
Comparative Tracking Index	600 V	600 V	IEC 60112

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Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Burning Rate			
0.0787 in (2.00 mm)	1.6 in/min	40 mm/min	ISO 3795
0.0787 in (2.00 mm)	1.6 in/min	40 mm/min	FMVSS 302
Flammability Classification			IEC 60695-11-10, -20
0.06 in (1.5 mm)	HB	HB	
0.12 in (3.0 mm)	HB	HB	
Glow Wire Flammability Index			IEC 60695-2-12
0.06 in (1.5 mm)	1160 °F	625 °C	
0.12 in (3.0 mm)	1160 °F	625 °C	
Glow Wire Ignition Temperature			IEC 60695-2-13
0.06 in (1.5 mm)	1200 °F	650 °C	
0.12 in (3.0 mm)	1200 °F	650 °C	

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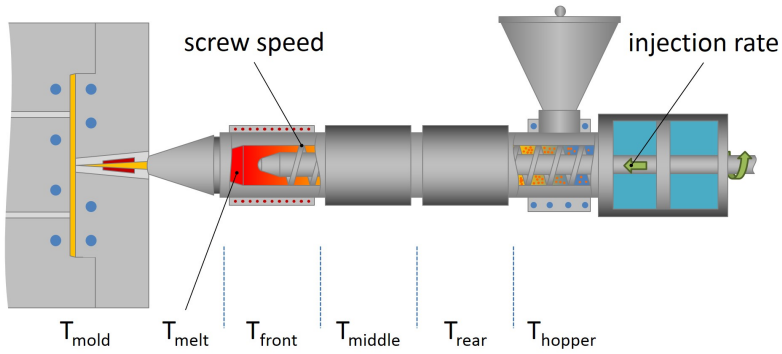

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	212 °F	100 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Suggested Max Regrind	20 %	20 %
Processing (Melt) Temp	374 to 428 °F	190 to 220 °C
Mold Temperature	140 to 248 °F	60 to 120 °C

Notes

These are typical property values not to be construed as specification limits.