

Technical Data Sheet

Schulamid 6 NV 12

Polyamide 6
LyondellBasell Industries
Engineering Plastics

Product Description

Low viscosity Polyamide 6

General

Features	<ul style="list-style-type: none"> • Good Surface Finish • High Flow 	<ul style="list-style-type: none"> • Low Viscosity • Oil Resistant
Automotive Specifications	<ul style="list-style-type: none"> • GM QK 002611 Color: 968001LS Black • IMDS ID 3970951 Color: 968001LS Black 	
UL File Number	<ul style="list-style-type: none"> • E86615 	
Processing Method	<ul style="list-style-type: none"> • Injection Molding 	
Resin ID (ISO 1043)	<ul style="list-style-type: none"> • PA6 	

Physical	Dry	Conditioned	Unit	Test Method
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Density	1.13	--	g/cm ³	ISO 1183/A
Water Absorption				ISO 62
Equilibrium, 73°F (23°C), 50% Rh	2.5	--	%	
Viscosity Number	130	--	cm ³ /g	ISO 307

Mechanical	Dry	Conditioned	Unit	Test Method
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Tensile Modulus	435000 (3000)	160000 (1100)	psi (MPa)	ISO 527-1/1A/1
Tensile Stress (Yield)	12300 (85.0)	6530 (45.0)	psi (MPa)	ISO 527-2/1A/50
Tensile Strain (Yield)	4.5	18	%	ISO 527-2/1A/50

Impact	Dry	Conditioned	Unit	Test Method
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Charpy Notched Impact Strength				ISO 179/1eA
-22°F (-30°C)	1.4 (3.0)	--	ft·lb/in ² (kJ/m ²)	
73°F (23°C)	2.9 (6.0)	9.5 (20)	ft·lb/in ² (kJ/m ²)	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F (-30°C)	No Break	--		
73°F (23°C)	No Break	No Break		

Hardness	Dry	Conditioned	Unit	Test Method
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Ball Indentation Hardness (H 358/30)	20300 (140)	12300 (85.0)	psi (MPa)	ISO 2039-1
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Thermal	Dry	Conditioned	Unit	Test Method
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Deflection Temperature Under Load				
66 Psi (0.45 Mpa), Unannealed	374	--	°F	ISO 75-2/Bf
	(190)		(°C)	
264 Psi (1.8 Mpa), Unannealed	140 (60.0)	--	°F (°C)	ISO 75-2/af

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Vicat Softening Temperature				
--	383 (195)	--	°F (°C)	ISO 306/B50
--	401 (205)	--	°F (°C)	ISO 306/A50
RTI Elec				UL 746B
0.030 In (0.75 Mm)	266 (130)	--	°F (°C)	
0.06 In (1.5 Mm)	266 (130)	--	°F (°C)	
0.12 In (3.0 Mm)	266 (130)	--	°F (°C)	
RTI Str				UL 746B
0.030 In (0.75 Mm)	149 (65.0)	--	°F (°C)	
0.06 In (1.5 Mm)	158 (70.0)	--	°F (°C)	
0.12 In (3.0 Mm)	158 (70.0)	--	°F (°C)	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	> 1.0E+15	> 1.0E+12	ohms	IEC 60093
Volume Resistivity	> 1.0E+13	> 1.0E+10	ohms·m	IEC 62631-3-1
Comparative Tracking Index	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate ¹				
0.0787 In (2.00 Mm)	0.0	--	in/min (mm/min)	ISO 3795
0.0787 In (2.00 Mm)	0.0	--	in/min (mm/min)	FMVSS 302
Flammability Classification				IEC 60695-11-10, -20
0.06 In (1.5 Mm)	V-2	--		
0.12 In (3.0 Mm)	V-2	--		
0.030 In (0.75 Mm)	HB	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.06 In (1.5 Mm)	1560 (850)	--	°F (°C)	
0.12 In (3.0 Mm)	1560 (850)	--	°F (°C)	

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Injection	Dry (English)	Dry (SI)
Drying Temperature	176 °F	80 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.04 to 0.10 %	0.04 to 0.10 %
Processing (Melt) Temp	482 to 518 °F	250 to 270 °C
Mold Temperature	140 to 194 °F	60 to 90 °C