

Technical Data

Product Description

35% Glass Reinforced, Heat Stabilized, Hydrolysis resistant

General

Material Status	<ul style="list-style-type: none"> Commercial: Active 		
Literature ¹	<ul style="list-style-type: none"> Processing (English) Technical Datasheet (English) White Paper - High Performance Plastics in Automotive Actuator Applications (English) 		
Search for UL Yellow Card	<ul style="list-style-type: none"> Envalior Akulon® 		
Availability	<ul style="list-style-type: none"> Africa & Middle East Asia Pacific 	<ul style="list-style-type: none"> Europe Latin America 	<ul style="list-style-type: none"> North America
Filler / Reinforcement	<ul style="list-style-type: none"> Glass Fiber, 35% Filler by Weight 		
Additive	<ul style="list-style-type: none"> Heat Stabilizer 		
Features	<ul style="list-style-type: none"> Heat Stabilized 	<ul style="list-style-type: none"> Hydrolysis Resistant 	
Processing Method	<ul style="list-style-type: none"> Injection Molding 		
Multi-Point Data	<ul style="list-style-type: none"> Creep Strain vs. Time (ISO 11403) 	<ul style="list-style-type: none"> Isothermal Stress vs. Strain (ISO 11403) 	<ul style="list-style-type: none"> Shear Modulus vs. Temperature, Dynamic (ISO 11403)
Resin ID	<ul style="list-style-type: none"> PA66-GF35 		

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (275°C/5.0 kg)	13	--	g/10 min	ISO 1133
Melt Volume-Flow Rate (MVR) (275°C/5.0 kg)	11	--	cm ³ /10min	ISO 1133
Molding Shrinkage				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.20	--	%	
Water Absorption				ISO 62
Saturation, 23°C	5.5	--	%	
Equilibrium, 23°C, 50% RH	1.5	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus				ISO 527-1
--	11500	7550	MPa	
120°C	5350	--	MPa	
140°C	5000	--	MPa	
Tensile Stress				ISO 527-2
Break	210	140	MPa	
Break, 120°C	109	--	MPa	
Break, 140°C	101	--	MPa	
Tensile Strain				ISO 527-2
Break	3.5	5.8	%	
Break, 120°C	7.4	--	%	
Break, 140°C	7.5	--	%	
Flexural Modulus	9400	--	MPa	ISO 178
Flexural Stress	270	--	MPa	ISO 178



Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	11	11	kJ/m ²	
23°C	14	18	kJ/m ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	74	74	kJ/m ²	
23°C	89	95	kJ/m ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	260	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	247	--	°C	ISO 75-2/A
Melting Temperature ³	260	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	2.0E-5	--	cm/cm/°C	
Transverse	6.0E-5	--	cm/cm/°C	
RTI Elec				UL 746B
0.71 mm	140	--	°C	
3.0 mm	140	--	°C	
RTI Imp				UL 746B
0.71 mm	120	--	°C	
3.0 mm	130	--	°C	
RTI Str				UL 746B
0.71 mm	120	--	°C	
3.0 mm	130	--	°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	1.0E+13	ohms	IEC 62631-3-2
Volume Resistivity	1.0E+12	1.0E+10	ohms·m	IEC 62631-3-1
Electric Strength	35	30	kV/mm	IEC 60243-1
Relative Permittivity				IEC 62631-2-1
100 Hz	4.00	10.0		
1 MHz	3.60	4.00		
Dissipation Factor				IEC 62631-2-1
100 Hz	5.0E-3	3000		
1 MHz	0.014	1000		
Comparative Tracking Index	500	500	V	IEC 60112

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

³ 10°C/min

