Strator® C-4

polyamide 66 alloy

Strator® C-4, a 40% long glass fiber reinforced high-flow PA66 alloy and can easily be processed on most injection molding machines.

General

Material Status	• Commercial: Active	
Availability	• Africa & Middle East • Asia Pacific • Europe	• Latin America • North America
Filler / Reinforcement	• Long Glass Fiber, 40% Filler by Weight	
Features	• High Flow	
Appearance	• Black	
Forms	• Pellets	

Physical	Dry	Conditioned	Unit	Test method
Density	1.50	--	g/cm³	ISO 1183
Molding Shrinkage - Flow [1]	0.30	--	%	Internal Method
Water Absorption (Equilibrium, 23°C, 50% RH)	1.5	--	%	ISO 62

Mechanical	Dry	Conditioned	Unit	Test method
Tensile Modulus				ISO 527-2
--	--	11000	MPa	
23°C	13000	--	MPa	
90°C	8800	--	MPa	
120°C	7800	--	MPa	
Tensile Stress				ISO 527-2
Break, 23°C	220	190	MPa	
Break, 90°C	145	--	MPa	
Break, 120°C	125	--	MPa	
Tensile Strain (Break)	2.2	--	%	ISO 527-2
Flexural Modulus (23°C)	10900	--	MPa	ISO 178
Flexural Stress (23°C)	330	270	MPa	ISO 178

Impact	Dry	Conditioned	Unit	Test method
Charpy Notched Impact Strength (23°C)	30	35	kJ/m²	ISO 179
Charpy Unnotched Impact Strength (23°C)	70	90	kJ/m²	ISO 179

Thermal	Dry	Conditioned	Unit	Test method
Heat Deflection Temperature				
0.45 MPa, Unannealed	245	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	237	--	°C	ISO 75-2/A
CLTE - Flow	2.3E-5	--	cm/cm/°C	ISO 7991
Thermal Conductivity	0.33	--	W/m/K	ISO 22007

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Electrical	Dry	Conditioned	Unit	Test method
Surface Resistivity	1.0E+12	--	ohms	ASTM D257
Electric Strength (2.00 mm)	35	--	kV/mm	IEC 60243-1
Comparative Tracking Index	500	--	V	IEC 60112

Injection	Dry	Unit
Drying Temperature	110	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.10	%
Suggested Max Regrind	15	%
Rear Temperature	270 to 300	°C
Middle Temperature	270 to 300	°C
Front Temperature	285 to 310	°C
Nozzle Temperature	285 to 320	°C
Processing (Melt) Temp	< 310	°C
Mold Temperature	80 to 160	°C

Injection Notes

Pre-drying

- Since polyamides are hygroscopic materials as well as sensitive to moisture during processing, this product should always be pre-dried. At a humidity content above 0.1%, the material will begin to degrade. Recommended drying time is 4 hours at 110°C in dry-air dryer.

Mold temperature

- The mold temperature is a compromise between the optimum properties that can be obtained from high crystallization and cycle time. Optimum surface quality requires a mold temperature above 100°C.

Regrind

- Regrind of highly filled thermoplastic materials should only be recycled with special care. The regrind content must never exceed 15%, and only regrind of optimum quality should be used. In any case, part properties should be checked.

Notes

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

[1] Tested in accordance with S.O.P. methods

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