

TECHNYL® C 216 BLACK

Polyamide 6
Solvay Engineering Plastics

Message:

TECHNYL® C 216 Black is an unreinforced polyamide 6, standard nucleation for fast cycling, for injection moulding. This grade offers a high fluidity and good mould release.

General Information				
UL YellowCard		E44716-235519		
Features		Fast molding cycle		
Uses		Power/other tools		
		Consumer goods application field		
Agency Ratings		EC 1907/2006 (REACH)		
		UL QMFZ2		
RoHS Compliance		RoHS compliance		
Appearance		Black		
		Natural color		
Forms		Particle		
Processing Method		Injection molding		
Resin ID (ISO 1043)		PA6		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.14	--	g/cm ³	ISO 1183/A
Water Absorption				ISO 62
23°C, 24 hr	1.3	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.7	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	3000	1100	MPa	ISO 527-2/1A
Tensile Stress				ISO 527-2/1A
Yield, 23°C	85.0	45.0	MPa	ISO 527-2/1A
Fracture, 23°C	50.0	--	MPa	ISO 527-2/1A
Tensile Strain				ISO 527-2
Yield, 23°C	4.0	16	%	ISO 527-2
Fracture, 23°C	10	> 200	%	ISO 527-2
Flexural Modulus (23°C)	2800	1000	MPa	ISO 178
Flexural Stress (23°C)	100	40.0	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method

Charpy Notched Impact Strength (23°C)	3.5	84	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	No Break	No Break		ISO 179/1eU
Notched Izod Impact (23°C)	4.5	75	kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, not annealed	165	--	°C	ISO 75-2/Bf
1.8 MPa, not annealed	60.0	--	°C	ISO 75-2/ Af
Melting Temperature	222	--	°C	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+14	1.0E+12	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+13	ohms · cm	IEC 60093
Dielectric Strength (2.00 mm)	--	18	kV/mm	IEC 60243-1
Relative Permittivity	3.40	3.90		IEC 60250
Dissipation Factor	0.023	0.10		IEC 60250
Comparative Tracking Index				IEC 60112
Solution a	600	--	V	IEC 60112
Solution B	575	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
1.6 mm	HB	--		UL 94
3.2 mm	HB	--		UL 94
Oxygen Index	26	--	%	ISO 4589-2
Injection	Dry	Unit		
Drying Temperature	80		°C	
Suggested Max Moisture	0.20		%	
Rear Temperature	230 - 235		°C	
Middle Temperature	235 - 240		°C	
Front Temperature	235 - 245		°C	
Mold Temperature	60 - 80		°C	
Injection instructions				

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point mini -20°C. Recommended time 2-4h

Injection Advice:
For unfilled polyamide, Solvay recommends the use of high alloy steel with a weak chromium content. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm). For Mould Temperature, in the case of parts where the surface roughness is required we can recommend a temperature of 90°C to 120°C with an optimum at 105°C.

The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China



WECHAT