TECHNYL® C 216 V50 BLACK Z

Polyamide 6

Solvay Engineering Plastics

Message:

TECHNYL® C 216 V50 Black Z is a polyamide 6, reinforced with 50% of glass fibre, for injection moulding. This grade offers high mechanical strength, high surface aspect by easy flow & low pressure moulding for injection moulding.

General Information	
Filler / Reinforcement	Glass fiber reinforced material, 50% filler by weight
Features	Good dimensional stability Rigidity, high Good liquidity
Uses	Industrial application Application in Automobile Field Consumer goods application field
Agency Ratings	EC 1907/2006 (REACH)
RoHS Compliance	RoHS compliance
Appearance	Black Natural color
Forms	Particle
Processing Method	Injection molding
Multi-Point Data	Isothermal Stress vs. Strain (ISO 11403-1)
Resin ID (ISO 1043)	PA6-GF50

Physical	Dry	Conditioned	Unit	Test Method
Density	1.56	--	g/cm³	ISO 1183/A
Water Absorption				ISO 62
23°C, 24 hr	0.75	--	%	ISO 62
Equilibrium, 23°C, 50% RH	1.6	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus (23°C)	17500	10000	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	215	135	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	2.7	5.0	%	ISO 527-2
Flexural Modulus (23°C)	16000	9000	MPa	ISO 178
Flexural Stress (23°C)	325	210	MPa	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Unnotched Impact Strength (23°C)	82	95	kJ/m²	ISO 179/1eU

Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	210	--	°C	ISO 75-2/Af
Melting Temperature	222	--	°C	ISO 11357-3

Injection	Dry	Unit
Drying Temperature	80	°C
Suggested Max Moisture	0.20	%
Rear Temperature	235 - 240	°C
Middle Temperature	240 - 250	°C
Front Temperature	250 - 260	°C
Mold Temperature	60 - 90	°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 2-4hInjection Advice:
For reinforced polyamide, Solvay recommends the use of steel with a high content of Carbon and purified for polishing to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (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

Recommended distributors for this material

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