TECHNYL® A 218HPS V50 BLACK 21N

Polyamide 66/6 Copolymer

Solvay Engineering Plastics

Message:

TECHNYL® A 218HPS V50 is a polyamide blend of polyamide 6.6 polyamide 6 reinforced with 50% of glass fiber, high heat stabilized for injection moulding. This grade is designed to offer a long term heat resistance and is suitable to work in environments characterized by a very high temperature. (210°C)

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 50% filler by weight		
Additive	heat stabilizer		
Features	Heat Stabilized - Inorganic Rigidity, high Excellent appearance		
Uses	Application in Automobile Field		
Agency Ratings	EC 1907/2006 (REACH)		
RoHS Compliance	RoHS compliance		
Appearance	Black		
Forms	Particle		
Processing Method	Injection molding		
Resin ID (ISO 1043)	PA66+PA6-GF50		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	1.52	g/cm³	ISO 1183/A
Molding Shrinkage			ISO 294-4
--	0.25	%	ISO 294-4
Transverse flow	0.61	%	ISO 294-4
Flow	0.15	%	ISO 294-4
Water Absorption			ISO 62
Saturated, 23°C	4.6	%	ISO 62
Equilibrium, 23°C, 50% RH	1.7	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus (23°C)	17800	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	239	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	2.7	%	ISO 527-2
Flexural Modulus (23°C)	14000	MPa	ISO 178
Flexural Stress (23°C)	366	MPa	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (23°C)	18	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	98	kJ/m²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**

Heat Deflection Temperature			
0.45 MPa, not annealed	254	°C	ISO 75-2/Bf
1.8 MPa, not annealed	239	°C	ISO 75-2/Af
Melting Temperature	248	°C	ISO 11357-3

Injection	Nominal Value	Unit
Drying Temperature	80	°C
Suggested Max Moisture	0.20	%
Rear Temperature	270 - 280	°C
Middle Temperature	280 - 290	°C
Front Temperature	280 - 300	°C
Mold Temperature	70 - 100	°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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