TECHNYL® A 118 V50 BLACK 51

Polyamide 66

Solvay Engineering Plastics

Message:

TECHNYL® A 118 V50 Black 51 is a polyamide 66, reinforced with 50% of glass fibre, heat stabilized and modified viscosity, for injection moulding. This grade offers excellent combination between thermal and mechanical properties. It has a high fluency that permits the injection mould of big dimension or complex geometric structures, an excellent dimensional stability and chemical stability.

General Information	
Filler / Reinforcement	Glass fiber reinforced material, 50% filler by weight
Additive	heat stabilizer
Features	Heat Stabilized - Inorganic Rigidity, high Good liquidity Good demoulding performance
Uses	Large household appliances and small household appliances General
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)	PA66-GF50

Physical	Dry	Conditioned	Unit	Test Method
Density	1.55	--	g/cm³	ISO 1183/A
Water Absorption				ISO 62
23°C, 24 hr	0.60	--	%	ISO 62
Saturated, 23°C	3.6	--	%	ISO 62
Equilibrium, 23°C, 50% RH	1.4	--	%	ISO 62

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	17000	13600	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	215	155	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	2.2	3.2	%	ISO 527-2

Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (23°C)	14	15	kJ/m²	ISO 179/1eA

Charpy Unnotched Impact Strength (23°C)	90	80	kJ/m²	ISO 179/1eU
Notched Izod Impact (23°C)	14	16	kJ/m²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	250	--	°C	ISO 75-2/Af
Melting Temperature	261	--	°C	ISO 11357-3
Injection	Dry	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

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