

TECHNYL® A 218 V15 NATURAL

Polyamide 66
Solvay Engineering Plastics

Message:

TECHNYL® A 218 V15 Natural is a polyamide 66, reinforced with 15% of glass fibre, heat stabilized, for injection moulding. This grade offers an excellent combination between thermal and mechanical properties.

General Information				
UL YellowCard		E44716-235569		
Filler / Reinforcement		Glass fiber reinforced material, 15% filler by weight		
Additive		heat stabilizer		
Features		Heat Stabilized - Inorganic		
		Good dimensional stability		
		Good liquidity		
		Good demoulding performance		
Uses		Large household appliances and small household appliances		
		Electrical/Electronic Applications		
		Industrial application		
		Application in Automobile Field		
		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)		PA66-GF15		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.24	--	g/cm ³	ISO 1183/A
Water Absorption (23°C, 24 hr)	1.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	6200	4300	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	125	90.0	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	4.0	--	%	ISO 527-2
Flexural Modulus (23°C)	5300	3500	MPa	ISO 178

Flexural Stress (23°C)	--	115	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (23°C)	7.0	--	kJ/m ²	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	41	67	kJ/m ²	ISO 179/1eU
Notched Izod Impact (23°C)	6.0	9.0	kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	245	--	°C	ISO 75-2/Af
Melting Temperature	263	--	°C	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	6.0E+15	1.0E+13	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+15	ohms·cm	IEC 60093
Dielectric Strength (2.00 mm)	31	30	kV/mm	IEC 60243-1
Dissipation Factor	0.010	0.11		IEC 60250
Comparative Tracking Index (Solution A)	450	325	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (3.2 mm)	HB	--		UL 94
Oxygen Index	24	--	%	ISO 4589-2
Injection	Dry	Unit		
Drying Temperature	80		°C	
Suggested Max Moisture	0.20		%	
Rear Temperature	270 - 280		°C	
Middle Temperature	275 - 285		°C	
Front Temperature	280 - 290		°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 2-4h

Injection 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

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.

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

