TECHNYL STAR® S 218 V35 NATURAL

Polyamide 6

Solvay Engineering Plastics

Message:

TECHNYL STAR® S 218 V35 Natural is based on a patented high flow polyamide 6 resin (TechnylStar), heat stabilized, reinforced with 35% of glass fibre, for injection moulding. Due to its outstanding flow caracteristics, this grade provides a significant productivity improvement and allows more freedom in mould and part design versus a standard polyamide solutions.

General Information	
UL YellowCard	E44716-235536
Filler / Reinforcement	Glass fiber reinforced material, 35% filler by weight
Additive	heat stabilizer
Features	Heat Stabilized - Inorganic Good dimensional stability Excellent appearance High liquidity Good demoulding performance
Uses	Industrial application Furniture General Consumer goods application field
Agency Ratings	EC 1907/2006 (REACH) UL QMFZ2
RoHS Compliance	RoHS compliance
Appearance	Black Natural color
Forms	Particle
Processing Method	MuCell® Injection Molding Injection molding
Resin ID (ISO 1043)	PA6-GF35

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm³	ISO 1183/A
Water Absorption				ISO 62
23°C, 24 hr	0.90	--	%	ISO 62
Equilibrium, 23°C, 50% RH	1.9	--	%	ISO 62

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	11000	7400	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	195	115	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	3.0	4.0	%	ISO 527-2
Flexural Modulus (23°C)	10000	6200	MPa	ISO 178
Flexural Stress (23°C)	285	195	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (23°C)	11	16	kJ/m^2	ISO 179/1eA
Charpy Unnotched Impact Strength (23°C)	60	70	kJ/m^2	ISO 179/1eU
Notched Izod Impact (23°C)	11	16	kJ/m^2	ISO 180
Unnotched Izod Impact Strength (23°C)	75	80	kJ/m^2	ISO 180/1U
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
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (3.2 mm)	HB	--		UL 94
Glow Wire Flammability Index (1.6 mm)	650	--	°C	IEC 60695-2-12
Injection	Dry	Unit		
Drying Temperature	80		°C	
Suggested Max Moisture	0.20		%	
Rear Temperature	230 - 235		°C	
Middle Temperature	235 - 240		°C	
Front Temperature	240 - 245		°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

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