TECHNYL® C 52G2 MV25 NATURAL

Polyamide 6

Solvay Engineering Plastics

Message:

TECHNYL® C 52G2 MV25 Natural is a Non-phosphorous and Non-halogenated flame retardant polyamide 6, reinforced with 25% of mixed glass fibre and mineral filler, for injection moulding. This flame retardant grade offers a low smoke toxicity, a high glow-wire resistance and good all round mechanical properties

General Information	
UL YellowCard	E44716-235532
Filler / Reinforcement	Glass \mineral, 25% filler by weight
Additive	heat stabilizer Flame retardancy
Features	Anti-arc Phosphorus content, low (to none) Halogen-free
Uses	Electrical/Electronic Applications
Agency Ratings	EC 1907/2006 (REACH) UL QMFZ2
RoHS Compliance	RoHS compliance
Appearance	Grey Natural color
Forms	Particle
Processing Method	Injection molding
Resin ID (ISO 1043)	PA6-(MD+GF)25 FR(30)

Physical	Dry	Conditioned	Unit	Test Method
Density	1.37	--	g/cm³	ISO 1183/A
Water Absorption				ISO 62
23°C, 24 hr	1.1	--	%	ISO 62
Saturated, 23°C	6.0	--	%	ISO 62
Equilibrium, 23°C, 50% RH	2.3	--	%	ISO 62

Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	7600	3800	MPa	ISO 527-2/1A
Tensile Stress (Break, 23°C)	110	55.0	MPa	ISO 527-2/1A
Tensile Strain (Break, 23°C)	2.6	11	%	ISO 527-2
Flexural Modulus (23°C)	7400	3300	MPa	ISO 178

Flexural Stress (23°C)	165	80.0	MPa	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	3.0	--	kJ/m²	ISO 179/1eA
23°C	4.0	7.0	kJ/m²	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-30°C	40	--	kJ/m²	ISO 179/1eU
23°C	45	70	kJ/m²	ISO 179/1eU
Notched Izod Impact (23°C)	4.6	8.2	kJ/m²	ISO 180
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Heat Deflection Temperature				
0.45 MPa, not annealed	215	--	°C	ISO 75-2/Bf
1.8 MPa, not annealed	190	--	°C	ISO 75-2/Af
Melting Temperature	222	--	°C	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Dielectric Strength (0.800 mm)	37	--	kV/mm	IEC 60243-1
Comparative Tracking Index (Solution A)	500	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.8 mm	V-2	--		UL 94
1.6 mm	V-2	--		UL 94
3.2 mm	V-2	--		UL 94
Glow Wire Flammability Index				IEC 60695-2-12
1.6 mm	960	--	°C	IEC 60695-2-12
3.2 mm	960	--	°C	IEC 60695-2-12
Oxygen Index	31	--	%	ISO 4589-2
Injection	**Dry**	**Unit**		
Drying Temperature	80		°C	
Suggested Max Moisture	0.20		%	
Rear Temperature	230 - 235		°C	
Middle Temperature	235 - 240		°C	
Front Temperature	235 - 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:
All reinforced flame retardant compounds generate some level of abrasion/corrosion to the steel processing equipment.
These issues can be worsened by using incorrect processing conditions (temperatures, residence time, moisture level ...) during the moulding process. Therefore, Solvay recommends to use the advised processing conditions detailed in this technical data sheet. For equipment that comes into contact with molten flame retarded compounds, Solvay advises to use a steel containing high chromium & high carbon content (minimum concentration of 16% Chromium) to prevent corrosion and abrasion. For the correct reference of steel associated to flame retardant compounds processing, please refer to your equipment manufacturers. For Mould Temperature, in the case of parts where the surface roughness is required we can recommend a temperature at 120°C. Of course it should be noted that this improvement in the surface appearance may be at the expense of the cycle time.

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