TECHNYL® SAFE A 219WFC V30 NC

DOMO Engineering Plastics - *Polyamide 66*

General Information

Product Description

*Previously TECHNYL A 218W V30 NATURAL

TECHNYL SAFE A 219WFC V30 NC is a polyamide 66, 30% glass fibre reinforced, heat stabilized with organic stabiliser for injection moulding. Designed to offer an improved hydrolisis resistance and chlorine resistance vs standard PA66, for cold, warm and hot temperature in domestic and industrial water management components including, but not limited to components in contact with drinking water where elevated levels of chlorine could be present.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight		
Additive	• Heat Stabilizer	• Hydrolysis Resistant	
Features	• Chlorine Resistant • Drinking Water Contact Acceptable	• Food Contact Acceptable • Heat Stabilized - Organic	• Hydrolytically Stable
Uses	• Appliances • Compressor Parts • Consumer Applications	• Electrical/Electronic Applications • HVAC Applications • Industrial Applications	• Pump Parts • Water Management
Agency Ratings	• ACS • DVGW W270 • EC 1907/2006 (REACH)	• KTW Guidelines BWGL • NSF STD-61 • UL 94	• WRAS
RoHS Compliance	• RoHS Compliant		
Automotive Specifications	• IMDS ID 570609065		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66,GF30,MH,S14-100		
Resin ID (ISO 1043)	• PA66-GF30		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.36	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0 to 1.2	--	%	
Flow	0.30 to 0.40	--	%	
Water Absorption (24 hr, 73°F)	0.80	--	%	ISO 62
Water Absorption (Saturation, 73°F)	5.3	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	2.2 to 2.4	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.45E+6	1.02E+6	psi	ISO 527-1
Tensile Stress (Break)	27600	18100	psi	ISO 527-2
Tensile Strain (Break)	3.0	7.0	%	ISO 527-2
Flexural Modulus	1.31E+6	1.02E+6	psi	ASTM D790
Flexural Modulus	1.31E+6	914000	psi	ISO 178
Flexural Strength	39200	19600	psi	ASTM D790
Flexural Stress	39900	31200	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	5.7	7.1	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	40	45	ft·lb/in²	ISO 179/1eU

Notched Izod Impact Strength (73°F)	5.7	7.6	ft·lb/in²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	36	40	ft·lb/in²	ISO 180/1U
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	500	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	491	--	°F	ISO 75-2/A
Melting Temperature [2]	504	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Surface Resistivity	1.0E+15	--	ohms	IEC 62631-3-2
Volume Resistivity	1.0E+13	--	ohms·m	IEC 62631-3-1
Electric Strength	890	--	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 1	--		IEC 60112
Comparative Tracking Index	400	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating				UL 94
0.06 in	HB	--		
0.12 in	HB	--		
Glow Wire Flammability Index (0.06 in)	1200	--	°F	IEC 60695-2-12

Processing Information

Injection	**Dry**	**Unit**
Drying Temperature	176	°F
Suggested Max Moisture	0.15	%
Rear Temperature	518 to 536	°F
Middle Temperature	527 to 545	°F
Front Temperature	536 to 554	°F
Mold Temperature	158 to 212	°F

Injection Notes

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 minimum -20°C. Recommended time 2-4h.

Notes

[1] Typical properties: these are not to be construed as specifications.

[2] 10°C/min