TECHNYL® PURE D 219E1CR V33 BK

DOMO Engineering Plastics - *Polyamide 610 + PA 66*

General Information

Product Description

*Previously TECHNYL eXten D 219E1CR V33 BLACK

TECHNYL PURE D 219E1CR V33 BK is a polyamide PA610/66, reinforced with 33% of glass fibre, organic heat stabilized for injection moulding. This grade offers a clean formula free of additives containing halogens and other substances that can migrate and generate corrosion issues. Electrofriendly heat stabilized grade. Suitable for laser printing. < 50ppm halogen content, based on internal elution analysis. Thanks to the innovative formula it offers lower moisture absorption, improved electrical insulation, higher dimensional stability and good heat stability compared to PA66 compounds. Exceptional hydrolysis resistance.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 33% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Chemical Resistant • Electrical Corrosion Resistant • Good Electrical Properties	• Heat Stabilized - Organic • Hydrolysis Resistant • Laser Markable	• Outstanding Surface Finish • Renewable Resource Content
Uses	• Automotive Applications	• Hydrogen Fuel Cell	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA610+PA66-GF33		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.35	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.30	--	%	
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.64E+6	1.22E+6	psi	ISO 527-1
Tensile Stress (Break)	29000	20300	psi	ISO 527-2
Tensile Strain (Break)	2.9	5.0	%	ISO 527-2
Flexural Modulus	1.43E+6	--	psi	ISO 178
Flexural Stress	33900	--	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.8	--	ft·lb/in²	
73°F	6.7	7.6	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	38	--	ft·lb/in²	
73°F	40	40	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	437	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	421	--	°F	ISO 75-2/A
Melting Temperature [2]	500	--	°F	ISO 11357-3
Electrical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Volume Resistivity	1.0E+13	--	ohms·m	IEC 62631-3-1

Electric Strength	560	--	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 0	--		IEC 60112
Comparative Tracking Index	675	--	V	IEC 60112
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Flame Rating (0.030 in)	HB	--		UL 94

Processing Information

Injection	**Dry**	**Unit**
Drying Temperature	176	°F
Suggested Max Moisture	0.15	%
Rear Temperature	509 to 527	°F
Middle Temperature	518 to 536	°F
Front Temperature	527 to 536	°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