TECHNYL® PURE J 219HT V35 BK

DOMO Engineering Plastics - *Polyamide 66/6T Copolymer*

General Information

Product Description

TECHNYL PURE J 219HT V35 BK is a high temperature polyamide, reinforced with 35% of glass fibers, organic heat stabilized for injection moulding. This grade offers a clean formula free of additives containing halogens and other substances that have the potential to release metallic ions, as metallic ions are known to negatively affect the electrochemical reaction in a PEM Fuel Cell Stack. For this grade a metallic ion content < 8 ppm is guaranteed, based on internal ion migration analysis. Thanks to the innovative formulation it offers lower moisture absorption, improved electrical insulation, higher dimensional stability and good heat stability compared to standard PA66 compounds.

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Electrical Corrosion Resistant • Good Electrical Properties	• Heat Stabilized - Organic • High Dimensional Stability	• High Flow
Uses	• Automotive Applications	• Hydrogen Fuel Cell	
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66/6T-GF35		

Properties [1]

Physical	Nominal Value	Unit	Test Method
Density	1.42	g/cm³	ISO 1183
Water Absorption (24 hr, 73°F)	0.30	%	ISO 62
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1.52E+6	psi	ISO 527-1
Tensile Stress (Break)	27600	psi	ISO 527-2
Tensile Strain (Break)	2.9	%	ISO 527-2
Flexural Modulus	1.20E+6	psi	ISO 178
Flexural Stress	43500	psi	ISO 178
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength (73°F)	5.7	ft·lb/in²	ISO 179/1eA
Charpy Unnotched Impact Strength (73°F)	33	ft·lb/in²	ISO 179/1eU
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load (264 psi, Unannealed)	473	°F	ISO 75-2/A
Electrical	**Nominal Value**	**Unit**	**Test Method**
Electric Strength	1000	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 0		IEC 60112
Comparative Tracking Index	650	V	IEC 60112
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	176	°F
Suggested Max Moisture	0.15	%
Rear Temperature	554 to 572	°F

Middle Temperature	563 to 581 °F
Front Temperature	572 to 590 °F
Mold Temperature	194 to 230 °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.