TECHNYL® RED A 218HPS V50 BK 21N

DOMO Engineering Plastics - *Polyamide 66 + PA 6*

General Information

Product Description

TECHNYL RED A 218HPS V50 BK 21N is a polyamide blend of polyamide 6.6 polyamide 6 reinforced with 50% of glass fiber, high heat stabilized for injection moulding. This grade is designed to offer a long term heat resistance and is suitable to work in environments characterized by a very high temperature (210°C).

General			
Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Additive	• Heat Stabilizer		
Features	• Good Heat Resistance • Good Surface Finish	• Heat Aging Resistant • Heat Stabilized	• High Stiffness
Uses	• Automotive Applications		
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66+PA6-GF50		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.56	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.70 to 0.90	--	%	
Flow	0.20 to 0.40	--	%	
Water Absorption (24 hr, 73°F)	0.10 to 0.20	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.6	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	2.54E+6	1.51E+6	psi	ISO 527-1
Tensile Stress (Break)	34500	22300	psi	ISO 527-2
Tensile Strain (Break)	2.7	5.4	%	ISO 527-2
Flexural Modulus	2.03E+6	1.37E+6	psi	ISO 178
Flexural Stress	53700	36300	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	7.6	7.6	ft·lb/in²	
73°F	8.6	12	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	48	--	ft·lb/in²	
73°F	48	49	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	486	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	450	--	°F	ISO 75-2/A
Melting Temperature [2]	487	--	°F	ISO 11357-3
Flammability	**Dry**	**Conditioned**	**Unit**	**Test Method**
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302

Processing Information

Injection	Dry	Unit
Drying Temperature	176	°F

Suggested Max Moisture	0.20 %
Rear Temperature	518 to 536 °F
Middle Temperature	536 to 554 °F
Front Temperature	536 to 572 °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