

TECHNYL® RED A 218HPS V35 BK 21N

DOMO Engineering Plastics - Polyamide 66 + PA 6

General Information

Product Description

TECHNYL RED A 218HPS V35 BK 21N is a polyamide blend of polyamide 6.6 polyamide 6 reinforced with 35% 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 • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Additive	• Heat Stabilizer
Features	• Good Heat Resistance • Heat Aging Resistant • Good Surface Finish • Heat Stabilized
Uses	• Automotive Applications
Agency Ratings	• EC 1907/2006 (REACH)
RoHS Compliance	• RoHS Compliant
Processing Method	• Injection Molding
ISO Designation (ISO 16396)	• PA66+PA6,GF35,MH,S09-120
Resin ID (ISO 1043)	• PA66+PA6-GF35

 Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.42	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.65 to 0.75	--	%	
Flow	0.20 to 0.30	--	%	
Water Absorption (24 hr, 73°F)	0.75	--	%	ISO 62
Water Absorption (Saturation, 73°F)	4.9	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9 to 2.1	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.68E+6	943000	psi	ISO 527-1
Tensile Stress (Break)	28300	16700	psi	ISO 527-2
Tensile Strain (Break)	3.3	6.6	%	ISO 527-2
Flexural Modulus	1.42E+6	856000	psi	ISO 178
Flexural Stress	43500	27600	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.3	--	ft·lb/in ²	
73°F	6.2	10	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	37	--	ft·lb/in ²	
73°F	43	45	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	478	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	439	--	°F	ISO 75-2/A
Melting Temperature ²	482	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Electric Strength	860	--	V/mil	IEC 60243-1
Comparative Tracking Index (CTI)	PLC 2	--		IEC 60112



Comparative Tracking Index	325	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.0394 in)	< 3.9	--	in/min	FMVSS 302
Glow Wire Flammability Index (0.06 in)	1340	--	°F	IEC 60695-2-12

Processing Information

Injection	Dry Unit
Drying Temperature	176 °F
Suggested Max Moisture	0.20 %
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

