TECHNYL® RED J 218HP V35 BK 21N

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

General Information

Product Description

TECHNYL RED J 218HP V35 BK 21N is a copolyamide 66/6T, reinforced with 35% glass fibre. Technyl® RED J offers outstanding long-term ageing performance up to 220°C (2000 hours) or 210°C (3000 hours). Technyl RED J has similar flow as standard PA66 and ensures a high chemical resistance and an excellent surface aspect. In addition, Technyl Red J is highly suitable for both vibration and hot gas welding, delivering high burst pressure levels. Recommended melt and mold temperatures are significantly lower than competitive PA4.6 or PPA resins, which saves energy during processing and minimizes part cooling time. The data provided are based on laboratory / experimental results and could be adjusted after industrial production.

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	• Excellent Processability • Good Heat Resistance	• Heat Aging Resistant • Heat Stabilized	• Outstanding Surface Finish
Uses	• Automotive Applications		
Agency Ratings	• EC 1907/2006 (REACH)		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		
ISO Designation (ISO 16396)	• PA66/6T,GF35,MH,S14-110		
Resin ID (ISO 1043)	• PA66/6T+6-GF35		

Properties [1]

Physical	Dry	Conditioned	Unit	Test Method
Density	1.42	--	g/cm³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.60 to 0.80	--	%	
Flow	0.10 to 0.30	--	%	
Water Absorption (24 hr, 73°F)	0.20	--	%	ISO 62
Water Absorption (Saturation, 73°F)	5.2	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 50% RH)	1.9	--	%	ISO 62
Mechanical	**Dry**	**Conditioned**	**Unit**	**Test Method**
Tensile Modulus	1.60E+6	1.04E+6	psi	ISO 527-1
Tensile Stress (Break)	29400	18100	psi	ISO 527-2
Tensile Strain (Break)	3.2	6.0	%	ISO 527-2
Flexural Modulus	1.51E+6	1.07E+6	psi	ISO 178
Flexural Stress	43500	29000	psi	ISO 178
Impact	**Dry**	**Conditioned**	**Unit**	**Test Method**
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.8	5.2	ft·lb/in²	
73°F	5.7	6.7	ft·lb/in²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	31	38	ft·lb/in²	
73°F	38	40	ft·lb/in²	
Thermal	**Dry**	**Conditioned**	**Unit**	**Test Method**
Deflection Temperature Under Load (66 psi, Unannealed)	504	--	°F	ISO 75-2/B
Deflection Temperature Under Load (264 psi, Unannealed)	455	--	°F	ISO 75-2/A
Melting Temperature [2]	518	--	°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	0.12	%
Rear Temperature	554 to 572	°F
Middle Temperature	563 to 581	°F
Front Temperature	572 to 590	°F
Mold Temperature	185 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