+135-3858-6433 (GuangDong)
+188-1699-6168 (ShangHai)
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TECHNYL® RED
High thermal resistance

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL RED J 218HP V35 BK 21N

TECHNYL RED J 218HP V35 BK21N 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

Feature	Excellent processability heat resistant	Excellent surface finish
Polymer type	PA66/6T copolymer	
Processing technology	Injection molding	
Certification	RoHS	EC 1907/2006 (REACH)
Applications	Automotive Applications	
Colors available	Black	
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA66/6T+6 - GF35
ISO 16396 designation	PA66/6T,GF350,M1,S14-110

	Condition	Standard	Unit	Value
Physical properties				
Density		ISO 1183	g/cm³	1.42
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.2
Molding shrinkage, normal		ISO 294-4, 2577	%	0.7
Mechanical properties				**dam / cond.***
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	11100 / 7400
Stress at break		ISO 527-1/-2	MPa	203 / 128
Strain at break		ISO 527-1/-2	%	3.2 / 6
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	80 / 90
Charpy impact strength, -30°C	-30°C	ISO 179/1eU	kJ/m²	68 / 80
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m²	12 / 14
Charpy notched impact strength, -30°C	-30°C	ISO 179/1eA	kJ/m²	10 / 11

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	Condition	Standard	Unit	Value

Thermal properties

Melting temperature, 10°C/min		ISO 11357-1	°C	270
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	239

Burning behaviour

Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

**: conditioned according to ISO 1110*

Processing conditions

Drying temperature/time	80 °C
Suggested max moisture	0.12 %
Rear temperature	290 - 300 °C
Middle temperature	295 - 305 °C
Front temperature	300 - 310 °C
Recommended mould temperature	85 - 100 °C

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.

Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120°C can be considered. The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.

Disclaimer

The information provided in this documentation corresponds to our technical knowledge at the date of its publication and do not constitute a specification. This information may be subject to revision at our discretion. Domo cannot anticipate all conditions under which this information and our products of other manufactures in combination with our products may be used. Domo accepts no responsibility for results obtained by the application of this information or for the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes. Unless otherwise agreed in writing, Domo sells the product without warranties. Buyers and users assume all responsibility and liability for loss or damage arising from handling and use of our products, whether used alone or in combination with other products. Unless specifically indicated, the grades mentioned are not suitable for applications in the pharmaceutical/medical sector.