

TECHNICAL DATA SHEET

TECHNYL C 219 V35 RD 3140

Polyamide 6, 35% glass fiber reinforced, heat-aging stabilized, for injection moulding

General

Feature	Heat-aging stabilized	
Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	RoHS EC 1907/2006 (REACH)	UL-Yellow Card
Colors available	Grey	Red
Forms	Pellets	

Product identification

ISO 1043 abbreviation	PA6-GF35
ISO 16396 designation	PA6,GF35,M1H,S14-110

Condition

Standard

Unit

Value

Physical properties

	Condition	Standard	Unit	Value
Density		ISO 1183	g/cm ³	1.41
Humidity absorption	T=23°C, 50% RH	ISO 62	%	2.2 - 2.4
Water absorption	24 hr, 23°C	ISO 62	%	1.4 - 1.5
Water absorption, saturation			%	5.3


Mechanical properties

dam / cond.*

	Condition	Standard	Unit	Value
Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	10800 / -
Stress at break		ISO 527-1/-2	MPa	185 / -
Strain at break		ISO 527-1/-2	%	3 / -
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m ²	100 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m ²	9 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m ²	90 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m ²	9 / -

	Condition	Standard	Unit	Value
Thermal properties				
Melting temperature, 10°C/min		ISO 11357-1	°C	221
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	220
Vicat softening temperature	50°C/h - 50N	ISO 306	°C	215

Burning behaviour

UL Yellow Card availability 	Click here to have access to the UL Yellow Card → E170540			
Flammability, 0.75 mm	0.75 mm	UL 94		HB
Flammability, 1.5 mm	1.5 mm	UL 94		HB
Burning rate, FMVSS, Thickness 1 mm		FMVSS 302		<100

*: conditioned according to ISO 1110

Processing conditions

Drying temperature/time	75-85°C / 2-4h (with dew point of dried air < -30 °C)
Recommended melt temperature	240 - 270 °C
Recommended mould temperature	80 - 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.