

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				
Density		ISO 1183	g/cm <sup>3</sup>	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.*
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 <sup>2</sup>	100 / -
Charpy notched impact strength, +23°C	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	9 / -
Izod impact strength, +23°C	+23°C	ISO 180/1U	kJ/m <sup>2</sup>	90 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m <sup>2</sup>	9 / -

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	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 → <a href="#">E170540</a>			
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

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