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# **TECHNYL**®



**TECHNICAL DATA SHEET** 

### **TECHNYL C 216 V30 BL 2234 CF**

TECHNYL C 216 V30 BL 2234 CF is a polyamide 6, reinforced with 30% of glass fibre, for injection moulding. This grade has good mechanical properties and offering an excellent combination between thermal and mechanical properties.

#### General

Polymer type	PA6 (Polyamide 6)	
Processing technology	Injection molding	
Certification	UL-Yellow Card	EC 1907/2006 (REACH)
Applications	Power Tool & Garden Equipment General Purpose	Sport
Colors available	Black Grey	Natural
Forms	Pellets	

#### **Product identification**

ISO 1043 abbreviation	PA6-GF30
ISO 16396 designation	PA6,GF30,M1,S14-090

Physical properties				
Density		ISO 1183	g/cm³	1.36
Water absorption	24 hr, 23°C	ISO 62	%	1.1

## Mechanical properties dam / cond.\*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9600 / 6400
Stress at break		ISO 527-1/-2	MPa	145 / 94
Strain at break		ISO 527-1/-2	%	2.1 / 3.7
Flexural modulus, ISO 178	2 mm/min	ISO 178	MPa	7000 / 4600
Flexural strength, ISO 178	2 mm/min	ISO 178	MPa	205 / 135
Charpy impact strength, +23°C	+23°C	ISO 179/1eU	kJ/m²	25 / 40

#### **Thermal properties**

Melting temperature, 10°C/min		ISO 11357-1	°C	222
Temp. of deflection under load, 0.45 MPa	0.45 MPa	ISO 75	°C	218
Temp. of deflection under load, 1.80 MPa	1.80 MPa	ISO 75	°C	200

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#### **Burning behaviour**

UL Yellow Card availability 🕕	Click here to have access to the UL Yellow Card → QMFZ2.E44716			
Flammability, 1.5 mm	1.5 mm	UL 94		НВ

<sup>\*:</sup> conditioned according to ISO 1110

#### **Processing conditions**

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	230 - 235 °C
Middle temperature	235 - 240 °C
Front temperature	240 - 250 °C
Recommended mould temperature	60 - 90 °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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