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# **TECHNYL**®



**TECHNICAL DATA SHEET** 

# **TECHNYL C 218 MT25 V15 BK**

TECHNYL C 218 MT25 V15 BK is a polyamide 6, reinforced 25 % mineral filler and 15 % of glass fibre, heat stabilized, for injection moulding. This grade offers an excellent planarity of the end product, with good mechanical properties and good dimensional stability.

#### General

Feature	Heat-aging stabilized Low warpage	High dimensional stability		
Polymer type	PA6 (Polyamide 6)	A6 (Polyamide 6)		
Processing technology	Injection molding			
Certification	RoHS	EC 1907/2006 (REACH)		
Applications	Automotive Applications			
Colors available	Black			
Forms	Pellets			

#### **Product identification**

ISO 1043 abbreviation PA6-MD25+GF15

Physical properties				
Density		ISO 1183	g/cm³	1.47
Water absorption	24 hr, 23°C	ISO 62	%	0.5
Molding shrinkage, parallel		ISO 294-4, 2577	%	0.3
Molding shrinkage, normal		ISO 294-4, 2577	%	0.8

# Mechanical properties dam / cond.\*

Tensile modulus	1 mm/min	ISO 527-1/-2	MPa	9700 / 5500
Stress at break		ISO 527-1/-2	MPa	125 / 70
Strain at break		ISO 527-1/-2	%	2.5 / -
Izod notched impact strength, +23°C	+23°C	ISO 180/1A	kJ/m²	4.2 / -

# **Thermal properties**

Melting temperature, 10°C/min	ISO 11357-1	°C	222

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	Condition			
Electrical properties				
Volume resistivity		IEC 62631-3-1	ohm.m	1E+014
Surface resistivity		IEC 62631-3-1	ohm	1E+015

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

# **Processing conditions**

Drying temperature/time	80 °C
Suggested max moisture	0.2 %
Rear temperature	235 - 240 °C
Middle temperature	240 - 250 °C
Front temperature	250 - 260 °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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