

CELCON® ET-20R3 BK

CELCON®

- A CNT filled high-viscosity grade for general extrusion molding (rods, plates, sheets, etc.)
- Suitable for applications requiring surface resistivity 10^3 Ohm
- Cautions: Surface resistivity will change with extrusion conditions: die design, pressure, speed, etc.

Product information

Resin Identification	POM-CD4	ISO 1043
Part Marking Code	>POM-CD4<	ISO 11469

Rheological properties

Melt mass-flow rate	0.3 g/10min	ISO 1133
Melt mass-flow rate, Temperature	190 °C	
Melt mass-flow rate, Load	2.16 kg	

Typical mechanical properties

Tensile stress at yield, 50mm/min	55 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	6 %	ISO 527-1/-2
Flexural modulus	2500 MPa	ISO 178
Flexural strength	75 MPa	ISO 178
Charpy notched impact strength, 23°C	3.5 kJ/m ²	ISO 179/1eA

Thermal properties

Melting temperature, 10°C/min	165 °C	ISO 11357-1/-3
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Flammability

Burning Behav. at thickness h	HB class	IEC 60695-11-10
Thickness tested	0.8 mm	IEC 60695-11-10

Electrical properties

Surface resistivity	1000 Ohm	IEC 62631-3-2
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Physical/Other properties

Density	1370 kg/m ³	ISO 1183
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Injection

Drying Recommended	no
Drying Temperature	100 °C
Drying Time, Dehumidified Dryer	3 - 4 h
Processing Moisture Content	≤0.2 %
Melt Temperature Optimum	195 °C
Min. melt temperature	180 °C
Max. melt temperature	210 °C
Screw tangential speed	≤0.3 m/s
Mold Temperature Optimum	70 °C
Min. mould temperature	60 °C
Max. mould temperature	80 °C
Hold pressure range	60 - 120 MPa

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Characteristics

Processing	Injection Moulding, Extrusion
Delivery form	Pellets
Special characteristics	Increased electrical conductivity