

CELCON® AF-11

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- Aaramid powder-filled wear-resistance grade for general injection molding
- Suitable for parts requiring strong friction and wear resistance, particularly in contact with other plastics

Product information

Resin Identification	POM-Z5	ISO 1043
Part Marking Code	>POM-Z5<	ISO 11469

Rheological properties

Melt mass-flow rate	2 g/10min	ISO 1133
Melt mass-flow rate, Temperature	190 °C	
Melt mass-flow rate, Load	2.16 kg	
Moulding shrinkage, parallel	1.9 %	ISO 294-4, 2577

Typical mechanical properties

Tensile stress at yield, 50mm/min	58 MPa	ISO 527-1/-2
Tensile strain at yield, 50mm/min	10 %	ISO 527-1/-2
Nominal strain at break	11 %	ISO 527-1/-2
Flexural modulus	2700 MPa	ISO 178
Flexural strength	83 MPa	ISO 178
Charpy notched impact strength, 23°C	4 kJ/m ²	ISO 179/1eA
Poisson's ratio	0.378	

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
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Electrical properties

Volume resistivity	1E14 Ohm.m	IEC 62631-3-1
Surface resistivity	1E16 Ohm	IEC 62631-3-2

Physical/Other properties

Humidity absorption, 2mm	0.2 %	Sim. to ISO 62
Density	1400 kg/m ³	ISO 1183

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

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Min. mould temperature	60 °C
Max. mould temperature	80 °C
Hold pressure range	60 - 120 MPa

Characteristics

Processing	Injection Moulding
Delivery form	Pellets
Special characteristics	Low wear / Low friction

Automotive

OEM	STANDARD	ADDITIONAL INFORMATION
Hyundai	MS237-09 Type E-1	Pyeongtaek, Korea