

Compound No.: 8795

PRECITE® K ICF 20 4 ECO black (8795)

PBT+PET CF 20

PRECITE® K ICF 20 4 ECO black (8795) is a PBT/PET blend with 20% recycled carbon fiber hydrolysis stabilised. Despite lower density compared to PBT/PET blends with glass fiber reinforcement, the product has very high strength. The good tribological properties and improved surface finish make it the material of choice for precision components in automotive, mechanical engineering, E&E and household goods industries. The formulations of the sustainable ECO products are partly based on regenerated post-consumer feedstock and thus contribute to reducing the consumption of valuable raw materials.

hydrolysis / chemically stabilised surface modified recycled content Properties Modulus Strength Impact 13.600 MPa 115 MPa 50 kJ/m²

Sustainability

Recycled content		
Mechanical Properties		
Tensile modulus ISO 527-2	1 mm/min d.a.m.	13600 MPa
Tensile stress at break ISO 527-2	5 mm/min d.a.m.	115 MPa
Tensile strain at break ISO 527-2	5 mm/min d.a.m.	3,5 %
Charpy impact strength	23°C d.a.m.	50 kJ/m²
ISO 179-1/1eU	-30°C d.a.m.	50 kJ/m ²



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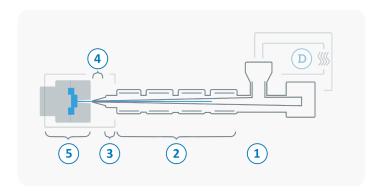
Charpy notched impact strength ISO 179-1/1eA	23°C d.a.m.	9 kJ/m
Thermal Properties		
Temperature of deflection under load HDT/A	1,8 MPa	210 °C
Melting temperature ISO 11357-3	DSC, 10K/min	250 °C
Flammability		
Flammability UL 94	1,6 mm Wall thickness	HB Class
General Properties		
Density ISO 1183	23°C	1,32 g/cm ³
Humidity absorption ISO 1110	70°C, 62% r.H.	0,1 - 0,3 %
Molding shrinkage ISO 294-4	flow transverse	0,2 - 0,4 % 0,7 - 0,9 %
Electrical Properties		
Surface resistivity IEC 62631-3-2	d.a.m.	10³ Ω





Processing

The values mentioned are recommendations. We only recommend desiccant / dry air dryers or vacuum dryers. Too long a drying time and the resulting residual moisture content below the lower limit can lead to filling problems and surface defects. The specified drying time refers to closed and undamaged bagged material. When processing from previously opened bags or from octabins with polyolefin inliners, a longer drying time may be necessary. It is recommended to check the residual moisture content after the drying process.



D	Drying time	3 - 4 h
	Drying temperature (τ <= -30°C)	120 - 140 °C
	Processing moisture	0,02 %
1	Feed section	60 - 80 °C
2	Temperature Zone 1 - Zone 4	260 - 280 °C
3	Nozzle temperature	260 - 290 °C
4	Melt temperature	270 - 280 °C
5	Mold temperature	80 - 100 °C
\bigcirc	Holding pressure, spec.	300 - 800 bar
	Back pressure, spec.	30 - 100 bar
	Injection speed	medium to high
	Screw speed	8 - 15 m/min