

Product Texts

KEPSTAN® PEKK resin is a high performance thermoplastic material, based on PolyEtherKetoneKetone (PEKK) highly stable chemical backbone. Its semi crystalline structure in solid state offers an outstanding combination of mechanical and thermal strength together with chemical and fire resistance.

KEPSTAN® 8010C30 is a carbon fiber reinforced compound, based on the 8000 series of KEPSTAN® resins. This series offers the highest glass transition temperature and the highest crystallinity, leading to the best tensile and compression strengths among the different series of KEPSTAN® PEKK copolymers.

KEPSTAN® 8010C30 is a low flow grade, suitable for extrusion, compression and injection molding.

KEPSTAN® 8010C30 is available in pelletform, and standard packaging is 10 kg boxes.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
^[C] Melt volume-flow rate, MVR	18	cm ³ /10min	ISO 1133
Temperature	380	°C	-
Load	5	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
^[C] Charpy impact strength, +23°C	34	kJ/m ²	ISO 179/1eU
^[C] Charpy notched impact strength, +23°C	6	kJ/m ²	ISO 179/1eA
ASTM Data			
Tensile Modulus	30300	MPa	ASTM D 638
Tensile Strength	239	MPa	ASTM D 638
Elongation at Break	1.3	%	ASTM D 638
Flexural Modulus	24800	MPa	ASTM D 790
Flexural Strength	369	MPa	ASTM D 790
Izod Impact notched, 1/8 in	81.7	J/m	ASTM D 256

[C]: CAMPUS

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	360	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	165	°C	ISO 11357-1/-2
Temp. of deflection under load, 1.80 MPa	300	°C	ISO 75-1/-2
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	3.0	mm	-

Electrical properties	Value	Unit	Test Standard
ASTM Data			
Surface Resistivity	100000	Ohm	ASTM D 257
Volume Resistivity	100000	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	0.4	%	Sim. to ISO 62
^[C] Density	1450	kg/m ³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Profile Extrusion, Other Extrusion, Compression Molding

Delivery form

Pellets, Black

Special Characteristics

Flame retardant

Features

High Crystallinity

Chemical Resistance

General Chemical Resistance

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Other text information**Injection molding**

Drying temperature and time: 120°C for 6 to 8 hours

Processing temperature: 370 – 380°C

Temperature settings - Injection: Rear 350°C / Center 375°C / Front 370°C / Nozzle 385°C

Mold temperature (to facilitate filling of the cavity and polymer crystallization): 230 - 240°C

Temperature settings - Extrusion: Zones 1/2/3/4: 355°C/ 370°C/ 385°C/ 385°C Die: 370°C