Kepstan® 8010C30

PAEK-CF30 ARKEMA

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.

K**EPSTAN® 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**	cm³/10min	ISO 1133
Temperature	**380**	°C	-
Load	**5**	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ISO Data			
[C] Tensile Modulus	**24300**	MPa	ISO 527
Tensile Strength	**247**	MPa	ISO 527
Strain at break	**1.5**	%	ISO 527
[C] Charpy impact strength, +23°C	**37**	kJ/m²	ISO 179/1eU
[C] Charpy notched impact strength, +23°C	**6**	kJ/m²	ISO 179/1eA

[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	**330**	°C	ISO 75-1/-2
Burning behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**0.8**	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	**1390**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing

Injection Molding, Profile Extrusion, Other Extrusion, Compression Molding

Features

High Crystallinity

Chemical Resistance

General Chemical Resistance

Delivery form
Pellets, Black

Special Characteristics
Flame retardant

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

Other text information

Injection molding

Drying temperature and time: 150°C for 3 to 4 hours or 120°C for 6 to 8 hours

Processing temperature: 375 – 385°C

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