Kepstan® 6010G30

PAEK-GF30 ARKEMA

Product Texts

KEPSTAN® PEKK resin is a high performance thermoplastic material, based on PolyEtherKetoneKetone (PEKK) highly stable chemical backbone. KEPSTAN® is a unique member of the PAEK family that incorporates distinctive structural features that allow for exceptional possibilities in the control of crystallinity. These features include a low Ether/Ketone ratio and a copolymer structure incorporating Terephthalic and Isophthalic moieties.

KEPSTAN® 6010G30 resin is a glass fiber reinforced compound, based on the 6000 series of KEPSTAN® resins. This series represents the pseudo-amorphous products of the KEPSTAN® family, offering the lowest melting point and the slowest crystallization behavior, while keeping Tg close to 160°C. These properties allow for lower processing temperatures and lead to glassy or semi-crystalline structures, depending on processing technologies and cooling conditions.

KEPSTAN® 6010G30 resin is a low flow grade,suitable for extrusion, compression and injection molding.

KEPSTAN® 6010G30 resin is available in pellet form and standard packaging is 10 kg boxes.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
[C] Melt volume-flow rate, MVR	**12**	cm³/10min	ISO 1133
Temperature	**380**	°C	-
Load	**5**	kg	-

[C]: CAMPUS

Mechanical properties	Value	Unit	Test Standard
ASTM Data			
Tensile Modulus	**11000**	MPa	ASTM D 638
Tensile Strength at Break	**154**	MPa	ASTM D 638
Elongation at Break	**2.5**	%	ASTM D 638
Flexural Modulus	**10800**	MPa	ASTM D 790
Flexural Strength	**240**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**113**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**302**	°C	ISO 11357-1/-3
Glass transition temperature, 10°C/min	**160**	°C	ISO 11357-1/-2
Burning behav. at thickness h	**V-0**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
[C] Oxygen index	**38**	%	ISO 4589-1/-2

[C]: CAMPUS

Electrical properties	Value	Unit	Test Standard
ISO Data			
Electric strength	**84**	kV/mm	IEC 60243-1
ASTM Data			
Surface Resistivity	**>1E15**	Ohm	ASTM D 257
Volume Resistivity	**>1E15**	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water absorption	**0.4**	%	Sim. to ISO 62
[C] Density	**1510**	kg/m³	ISO 1183

[C]: CAMPUS

Characteristics

Processing
Injection Molding, Film Extrusion, Profile Extrusion, Sheet Extrusion, Other Extrusion, Compression Molding

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

Delivery form
Pellets

Other text information

Injection molding

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

Processing temperature: 320 – 360°C

Temperature settings - Injection: Rear 300°C / Center 315°C / Front 320°C / Nozzle 330°C

Mold temperature (below Tg in any case): 80 - 120°C

Temperature settings - Extrusion: Zones 1/2/3/4: 290°C/ 320°C/ 330°C/ 320°C Die: 320°C