

TECHNICAL DATA SHEET

KEPSTAN® 8010G30

POLYETHERKETONEKETONE PELLET

KEPSTAN® 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® 8010G30 is glass fiber reinforced compounds, based on the 8000 series of KEPSTAN® resins. This grade offers the highest glass transition temperature and the highest crystallization rate, leading to very high strength and stiffness.

KEPSTAN® 8010G30 is low flow grades, suitable for extrusion, compression and injection molding.

KEPSTAN® 8010G30 is available in pellet form, and standard packaging is 20 kg boxes.

DESIGNATION

PEKK-GF30

MAIN APPLICATIONS

- Industry - Composites

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Injection Molding
- Profile Extrusion

RHEOLOGICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melt volume flow rate (MVR), 380°C / 5 kg (716°F / 11 lb)	5 - 9	cm³/10min	ISO 1133

MECHANICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Tensile modulus, 23°C (73°F), 1 mm/min (Flow direction, A12)	11100	MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 1 mm/min (Flow direction, A12)	182	MPa	ISO 527-1/-2
Elongation at break, 23°C (73°F), 1 mm/min (Flow direction, A12)	2.6	%	ISO 527-1/-2

THERMAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Melting temperature, 20°C/min (DSC, 2nd Heating)	360	°C	
Glass transition temperature, 20°C/min (DSC)	165	°C	
Specific heat temperature, 1.8 MPa	>330	°C	ISO 75-1/-2

ELECTRICAL PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Surface resistivity, 23°C (73,4°F)	>10E+15	ohm.cm	ASTM D257
Volumic (transversal) resistivity, 23°C (73,4°F)	>10E+15	ohm/sq	ASTM D257

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OTHER PROPERTIES

PROPERTIES	VALUE	UNIT	TEST STANDARD
Apparent density, 23°C (73°F)	1.52	g/cm ³	ISO 1183-1
Water absorption, 23°C (73°F), immersion, equilibrium (2mm)	0.4	%	ISO 62
Water absorption, 23°C (73°F) (After 24h, immersion, 2mm)	0.1	%	ISO 62

PACKAGING

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 20 kg / 44 lb boxes

SHELF LIFE

Indefinite when stored properly (sealed bags, appropriate UV protection and temperature)

PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: Rear 350°C / Center 375°C / Front 375°C / Nozzle 385°C (660°F / 710°F / 710°F / 725°F)
- Typical mold temperature - Injection molding: 220-240°C (430-465°F), to facilitate skin & core cristallization
- Drying time and temperature: 150°C (300°F) / 3-4 hours

SPECIAL CHARACTERISTICS

- Halogen Free Flame Retardant (HFFR)