

Product Information

VESTAKEEP® 2500 G High Purity

MEDIUM VISCOSITY, UNREINFORCED POLYETHER ETHER KETONE



VESTAKEEP® 2500 G High Purity is a medium viscosity, unreinforced polyether ether ketone for injection molding and extrusion. The product is refined by Evonik's special filtration technology.

The semi-crystalline polymer features superior, thermal and chemical resistance. Parts made from VESTAKEEP® 2500G High Purity are of low flammability.

VESTAKEEP® 2500 G High Purity can be processed by common machines for thermoplastics.

We recommend a melt temperature between 360°C and 380°C during the injection molding process. The mold temperature should be within a range of 160°C to 200°C, preferably 180°C.

VESTAKEEP® 2500 G High Purity is supplied as granules in 25 kg boxes with moisture-proof polyethylene liners.

Pigmentation may affect values.

Inside the original and undamaged packaging, the product has a shelf life of at least 2 years when stored in dry rooms at temperatures not exceeding 30°C.

For information about processing VESTAKEEP® 2500 G High Purity, please follow the general recommendations in our brochure "VESTAKEEP® PEEK Processing Guidelines".

The results shown have been generated from a low number of production lots. Therefore, they are preliminary and not yet the result of a statistical evaluation. Therefore they must not be used to establish specifications.

Key Features

Industrial Sector

Automotive and Mobility, Aircraft and Aerospace, Industry and Engineering

Processing

Injection molding

Delivery form

Pellets, Granules

Resistance to

Heat (thermal stability)

Additives

Unfilled

Mechanical properties ISO	dry	Unit	Test Standard
Tensile modulus	3600	MPa	ISO 527
Tensile strength	95	MPa	ISO 527
Yield stress	95	MPa	ISO 527
Yield strain	5.2	%	ISO 527
Stress at break	70	MPa	ISO 527
Nominal strain at break, tB	40	%	ISO 527
Charpy impact strength, +23°C	N	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	5.5	kJ/m ²	ISO 179/1eA
Type of failure	C	-	-

Thermal properties	dry	Unit	Test Standard
Melting temperature	341	°C	ISO 11357-1/-3
Melting Temperature	341	°C	ASTM D 3418

Physical properties	dry	Unit	Test Standard
Density	1300	kg/m ³	ISO 1183
Water absorption	0.02	%	Sim. to ISO 62
Bulk density, Granulate	0.816	kg/m ³	-
Density	1300	kg/m ³	ASTM D 792

Rheological properties	dry	Unit	Test Standard
Melt volume-flow rate, MVR	35	cm ³ /10min	ISO 1133
Temperature	380	°C	-
Load	5	kg	-

Test specimen production	dry	Unit	Test Standard
Injection Molding, melt temperature	380	°C	ISO 294
Injection Molding, mold temperature	180	°C	ISO 294

Injection Molding, injection velocity

200

mm/s

ISO 294

Characteristics

Applications

Electrical and Electronical

Special Characteristics

Semi-crystalline, Medium viscosity

Color

Natural color

Chemical Resistance

General chemical resistance