Product Information

VESTAKEEP® 50001XT black

HIGH VISCOSITY, CROSS-LINKABLE, UNREINFORCED, UNLUBRICATED POLYETHER ETHER KETONE



VESTAKEEP® 50001XT black is a high viscosity, unreinforced, unlubricated polyether ether ketone for injection molding and extrusion and can be cross-linked after processing by heat treatment.

The semi-crystalline polymer features superior property retention at elevated temperatures combined with the chemical resistance of standard PEEK. Parts made from VESTAKEEP® 50001XT black feature a very high resistance to creep.

VESTAKEEP® 50001XT black can be processed by common machines for PEEK processing.

VESTAKEEP® 50001XT black is supplied as granules in 25 kg boxes with moisture-proof polyethylene liners.

As VESTAKEEP® 50001XT black is a reactive system we recommend low melt temperatures and short cycle times. Please contact us so our experts can develop the right solution for application together with you.

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.

FOR FURTHER INFORMATION PLEASE CONTACT US AT EVONIK-HP@EVONIK.COM OR VISIT OUR PRODUCT AT WWW.INDUSTRIAL.VESTAKEEP.COM

Mechanical properties ISO	dry	Unit	Test Standard
Friction coefficient f, parallel	**0.27**	-	ISO 7148-2
Wear coefficient k, parallel	**2**	10E-6 mm^3/Nm	ISO 7148-2
Test speed	**0.5**	m/s	ISO 7148-2
Load	**4**	MPa	ISO 7148-2
Friction partner	**steel**	-	ISO 7148-2

Thermal properties	dry	Unit	Test Standard
Melting temperature	**178**	°C	ISO 11357-1/-3

Physical properties	dry	Unit	Test Standard
Density	**1300**	kg/m^3	ISO 1183

EVONIK Leading Beyond Chemistry

Shore D hardness, 1s, annealed	**90**	-	ASTM D 2240

Rheological properties	**dry**	**Unit**	**Test Standard**
Melt volume-flow rate, MVR	**7.44**	cm^3/10min	ISO 1133
Temperature	**380**	°C	-
Load	**5**	kg	-

Polymer analytics	**dry**	**Unit**	**Test Standard**
Moisture content	**0.04**	Gew.-%	ISO 15512

Characteristics

Key Feature, Processing
Injection Molding

Key Feature, Resistance to
Heat (Thermal Stability), Fire / Burn

Special Characteristics
Semi-crystalline, Crosslinkable, High viscosity

Features
Creep Resistance, Low Coefficient of Friction

Color
Black

Delivery form
Pellets, Granules

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Evonik Operations GmbH
Smart Materials
High Performance Polymers
45772 Marl / Germany
Tel: +49 2365 49-9878
evonik-hp@evonik.com

www.plastics-database.com