

Product Comparison

Technical Data

Product Description

TECAPEEK® natural polyetheretherketone - Stock Shapes (rods, plates, tubes)

Main features

- excellent chemical resistance
- high thermal resistance
- good heat deflection temperature
- good machinability
- very good slide and wear properties
- hydrolysis and superheated steam resistant

TECAPEEK®
natural

Target Industries

- aircraft and aerospace technology
- food technology
- oil and gas industry
- chemical plant engineering
- semiconductor technology
- food engineering
- medical technology
- automotive industry
- process engineering
- mechanical engineering

Typical characteristics

- Flame retardant and self-extinguishing
- Suitable for contact with foodstuffs according to (EC) No. 1935/2004
- Very low smoke density
- Very high resistance to high-energy radiation
- High abrasion resistance
- Low creep tendency
- Good machinability
- Good adhesive properties
- Good weldability
- high dimensional stability under heat
- Very high continuous service temperature

SUSTAPEEK
FG natural

Product Comparison

- Low coefficient of thermal expansion
- Good electrical insulating properties over a broad temperature range
- Good thermoformability
- Good wear resistance
- ideal combination of tensile strength, stiffness and impact strength
- Good sliding properties
- Good dimensional stability

Typical industries

- Bakery and Confectionery
- Meat, Fish and Poultry
- Processing
- Beverage Industry
- Food Industry
- Mechanical Engineering Industry

KetaSpire® KT-820

KetaSpire® KT-820 is a low flow grade of unreinforced polyetheretherketone (PEEK) supplied in a lubricated pellet form. KetaSpire® PEEK is produced to the highest industry standards and is characterized by a distinct combination of properties, which include excellent wear resistance, best-in-class fatigue resistance, ease of melt processing, high purity, and excellent chemical resistance to organics, acids, and bases.

These properties make it well-suited for applications in healthcare, transportation, electronics, chemical processing, and other industrial uses. KetaSpire® KT-820 can be easily processed using typical injection molding and extrusion processes. This resin is also available as KetaSpire® KT-820P in a natural-color coarse powder form for compounding.

Pellets of KT-820 are supplied lightly dusted with the lubricant calcium stearate (0.01% level) to aid with pellet conveyance in plastication screws. The equivalent non-lubricated natural color grade of low flow KetaSpire® is available as KT-820 NL.

- Black: KT-820 BK 95
- Natural: KT-820 NT

VESTAKEEP® 4500 G

VESTAKEEP® 4500 G is a high viscosity, fast crystallization polyether ether ketone for injection molding and extrusion

The semi-crystalline polymer features superior, thermal and chemical resistance. Parts made from VESTAKEEP® 4500 G are of low flammability.

Pigmentation may affect values.

VICTREX™ PEEK POLYMER 450G™

High performance thermoplastic material, unreinforced PolyEtherEtherKetone (PEEK), semi crystalline, granules for injection moulding and extrusion, standard flow, colour natural/beige.

Product Comparison

Applications for higher strength and stiffness as well as high ductility. Chemically resistant to aggressive environments. Suitable for steam sterilisation. Further information is available on request.

General	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™
Manufacturer / Supplier	• Ensinger Inc.	• Röchling Sustaplast SE & Co. KG	• Syensqo	• Evonik Industries AG	• Victrex plc
Generic Symbol	• PEEK	• PEEK	• PEEK	• PEEK	• PEEK
Additive	--	• Flame Retardant	• Lubricant	--	--
Features	<ul style="list-style-type: none"> • Chemical Resistant • Hydrolysis Resistant • Machinable • Steam Resistant • Wear Resistant 	<ul style="list-style-type: none"> • Abrasion Resistant • Creep Resistant • Electrically Insulating • Flame Retardant • Food Contact Acceptable • Good Adhesion • Good Dimensional Stability • Good Impact Resistance • Good Stiffness • Good Tensile Strength • Low Smoke Emission • Machinable • Radiation (Gamma) Resistant • Self Extinguishing • Wear Resistant • Weldable 	<ul style="list-style-type: none"> • Autoclave Sterilizable • Chemical Resistant • Ductile • E-beam Sterilizable • Ethylene Oxide Sterilizable • Fatigue Resistant • Flame Retardant • Good Dimensional Stability • Good Impact Resistance • Good Sterilizability • Heat Sterilizable • High Heat Resistance • Radiation (Gamma) Resistant • Radiation Sterilizable • Radiotranslucent • Steam Resistant • Steam Sterilizable 	<ul style="list-style-type: none"> • Chemical Resistant • Food Contact Acceptable • General Purpose • Good Thermal Stability • High Viscosity • Semi Crystalline 	--

Product Comparison

General	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™
Uses	<ul style="list-style-type: none"> Aerospace Applications Aircraft Applications Automotive Applications Medical/Healthcare Applications Non-specific Food Applications Oil/Gas Applications Semiconductor Applications 	<ul style="list-style-type: none"> Engineered Applications Non-specific Food Applications 	<ul style="list-style-type: none"> Aircraft Applications Automotive Applications Connectors Dental Applications Electrical/Electronic Applications Film Gears Hospital Goods Housings Industrial Applications Medical Devices Medical/Healthcare Applications Oil/Gas Applications Pump Parts Seals Surgical Instruments Tubing 	<ul style="list-style-type: none"> Automotive Applications Bio Energy Applications Engineered Applications General Purpose Industrial Applications Oil/Gas Applications 	--
Agency Ratings	<ul style="list-style-type: none"> ASTM D4000 	<ul style="list-style-type: none"> EC 1935/2004 	<ul style="list-style-type: none"> FAA FAR 25.853a³ ISO 10993 MIL P-46183 Type I USP Class VI⁴ 	--	--
RoHS Compliance	--	--	<ul style="list-style-type: none"> RoHS Compliant 	--	--
Appearance	<ul style="list-style-type: none"> Beige Opaque 	--	<ul style="list-style-type: none"> Black Natural Color 	--	<ul style="list-style-type: none"> Beige Natural Color
Forms	<ul style="list-style-type: none"> Shapes 	--	<ul style="list-style-type: none"> Pellets⁵ 	<ul style="list-style-type: none"> Granules 	<ul style="list-style-type: none"> Granules
Processing Method	--	--	<ul style="list-style-type: none"> Extrusion Blow Molding Film Extrusion Injection Molding Machining Profile Extrusion Thermoforming Wire & Cable Extrusion 	<ul style="list-style-type: none"> Extrusion Injection Molding 	<ul style="list-style-type: none"> Extrusion Injection Molding
Multi-Point Data	--	--	<ul style="list-style-type: none"> Isothermal Stress vs. Strain (ISO 11403) Viscosity vs. Shear Rate (ISO 11403) 	--	--

Product Comparison

Physical	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Density / Specific Gravity							
--	--	--	1.30	--	--	g/cm ³	ASTM D792
--	--	1.31	--	1.30	--	g/cm ³	ISO 1183
Crystalline	--	--	--	--	1.30	g/cm ³	ISO 1183
--	1.31	--	--	--	--	g/cm ³	
Melt Mass-Flow Rate (MFR) (400°C/2.16 kg)	--	--	3.0	--	--	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR) (380°C/5.0 kg)	--	--	--	9.0	--	cm ³ /10min	ISO 1133
Spiral Flow ⁷	--	--	--	--	11.0	cm	Internal Method
Molding Shrinkage							
Flow ⁸	--	--	1.1 to 1.3	--	--	%	ASTM D955
Across Flow ⁸	--	--	1.3 to 1.5	--	--	%	ASTM D955
Across Flow	--	--	--	1.2	--	%	ISO 294-4
Across Flow ⁹	--	--	--	--	1.3	%	ISO 294-4
Flow	--	--	--	0.90	--	%	ISO 294-4
Flow ⁹	--	--	--	--	0.90	%	ISO 294-4
Water Absorption							
24 hr	--	--	0.10	--	--	%	ASTM D570
24 hr, 23°C	0.030	--	--	--	--	%	ASTM D570
Saturation, 23°C	0.45	--	--	--	0.45	%	ISO 62
Equilibrium, 23°C, 50% RH	--	0.20	--	--	--	%	ISO 62
Water Absorption - Saturation (100°C)	--	--	--	--	0.55	%	ISO 62

Product Comparison

Mechanical	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Tensile Modulus							
-- ¹⁰	--	--	3500	--	--	MPa	ASTM D638
1% Secant : 23°C	4480	--	--	--	--	MPa	ASTM D638
--	--	4000	--	3800	--	MPa	ISO 527-1
--	--	--	3830	--	--	MPa	ISO 527-1/1A/1
23°C	--	--	--	--	4000	MPa	ISO 527-1
Tensile Strength							
Yield, 23°C	110	--	--	--	--	MPa	ASTM D638
Yield	--	110	--	96.0	--	MPa	ISO 527-2
Yield	--	--	96.0	--	--	MPa	ISO 527-2/1A/50
Yield, 23°C	--	--	--	--	98.0	MPa	ISO 527-2
Break, 23°C	62.1	--	--	--	--	MPa	ASTM D638
-- ¹⁰	--	--	95.0	--	--	MPa	ASTM D638
--	--	--	--	96.0	--	MPa	ISO 527-2
Tensile Elongation							
Yield ¹⁰	--	--	5.2	--	--	%	ASTM D638
Yield, 23°C	4.9	--	--	--	--	%	ASTM D638
Yield	--	--	--	5.0	--	%	ISO 527-2
Yield	--	--	4.9	--	--	%	ISO 527-2/1A/50
Break ¹¹	--	--	78	--	--	%	ASTM D638
Break, 23°C	> 30	--	--	--	--	%	ASTM D638
Break	--	20	--	30	--	%	ISO 527-2
Break, 23°C	--	--	--	--	45	%	ISO 527-2
Nominal Tensile Strain at Break	--	--	--	30	--	%	ISO 527-2
Flexural Modulus							
--	--	--	3700	--	--	MPa	ASTM D790 ISO 178
23°C	4140	--	--	--	--	MPa	ASTM D790
23°C	--	--	--	--	3800	MPa	ISO 178

Product Comparison

Mechanical	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Flexural Strength							
--	--	--	146	--	--	MPa	ASTM D790
23°C	179	--	--	--	--	MPa	ASTM D790
--	--	--	121	--	--	MPa	ISO 178
23°C ¹²	--	--	--	--	165	MPa	ISO 178
3.5% Strain, 23°C	--	--	--	--	125	MPa	ISO 178
125°C	--	--	--	--	85.0	MPa	ISO 178
175°C	--	--	--	--	19.0	MPa	ISO 178
275°C	--	--	--	--	12.5	MPa	ISO 178
Compressive Modulus (23°C)	3400	--	--	--	--	MPa	ASTM D695
Compressive Strength							
--	--	--	118	--	--	MPa	ASTM D695
1% Strain, 23°C	23.4	--	--	--	--	MPa	ASTM D695
5% Strain, 23°C	110	--	--	--	--	MPa	ASTM D695
10% Strain, 23°C	138	--	--	--	--	MPa	ASTM D695
23°C	--	--	--	--	125	MPa	ISO 604
120°C	--	--	--	--	70.0	MPa	ISO 604
Shear Strength	--	--	84.1	--	--	MPa	ASTM D732
Poisson's Ratio							
--	--	--	0.33	--	--		ASTM E132
23°C	--	--	--	0.41	--		ISO 527
Coefficient of Friction							ASTM D3702
Dynamic ¹³	0.25	--	--	--	--		
Static ¹⁴	0.20	--	--	--	--		
Wear Factor (0.28 MPa, 0.25 m/sec)	400	--	--	--	--	10 ⁻⁸ mm ³ /N·m	ASTM D3702
Limiting Pressure Velocity	69000.0	--	--	--	--	psi·fpm	ASTM D3702

Product Comparison

Impact	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Charpy Notched Impact Strength							ISO 179/1eA
23°C, Complete Break	--	--	--	7.0	--	kJ/m ²	
23°C	--	--	--	--	7.0	kJ/m ²	
Charpy Unnotched Impact Strength							
-30°C	--	--	--	No Break	--		ISO 179/1eU
23°C	--	--	--	--	No Break		ISO 179/1U
23°C	--	--	--	No Break	--		ISO 179/1eU
Notched Izod Impact							
--	--	--	91	--	--	J/m	ASTM D256
23°C	48	--	--	--	--	J/m	ASTM D256
--	--	--	9.2	--	--	kJ/m ²	ISO 180
23°C	--	--	--	--	8.0	kJ/m ²	ISO 180/A
Unnotched Izod Impact							
--	--	--	No Break	--	--		ASTM D4812 ISO 180
23°C	--	--	--	--	No Break		ISO 180/1U
Hardness	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Rockwell Hardness							ASTM D785
M-Scale	100	--	97	--	--		
R-Scale	125	--	--	--	--		
Durometer Hardness							
Shore D	88	--	--	--	--		ASTM D2240
Shore D, 1 sec	--	--	88	--	--		ASTM D2240
Shore D	--	88	--	86	--		ISO 868
Shore D, 23°C	--	--	--	--	85		ISO 868

Product Comparison

Thermal	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Deflection Temperature Under Load							
0.45 MPa, Unannealed	--	--	--	232	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	160	--	--	--	--	°C	ASTM D648
1.8 MPa, Unannealed	--	152	--	156	--	°C	ISO 75-2/A
1.8 MPa, Unannealed	--	--	--	--	152	°C	ISO 75-2/Af
1.8 MPa, Annealed, 3.20 mm ¹⁵	--	--	157	--	--	°C	ASTM D648
Glass Transition Temperature							
Onset	--	--	--	--	143	°C	ISO 11357-2
Midpoint	--	--	--	153	150	°C	ISO 11357-2
--	--	--	150	--	--	°C	ASTM D3418
Melting Temperature							
--	334	--	--	--	--	°C	
--	--	343	--	340	343	°C	ISO 11357-3
--	--	--	340	--	--	°C	ASTM D3418
CLTE							
Flow : -50 to 50°C	--	--	4.3E-5	--	--	cm/cm/°C	ASTM E831
Flow : 23 to 60°C	4.9E-5	--	--	--	--	cm/cm/°C	ASTM E831
Flow : 23 to 100°C	5.1E-5	--	--	--	--	cm/cm/°C	ASTM E831
Flow : 100 to 150°C	6.0E-5	--	--	--	--	cm/cm/°C	ASTM E831
Flow	--	5.0E-5	--	--	--	cm/cm/°C	DIN 53752
Flow : 23 to 55°C	--	--	--	6.9E-5	--	cm/cm/°C	ISO 11359-2
Flow : < 143°C	--	--	--	--	4.5E-5	cm/cm/°C	ISO 11359-2
Flow : > 143°C	--	--	--	--	1.2E-4	cm/cm/°C	ISO 11359-2
Transverse : 23 to 55°C	--	--	--	6.4E-5	--	cm/cm/°C	ISO 11359-2
CLTE - Average							ISO 11359-2
< 143°C	--	--	--	--	55	ppm/K	
> 143°C	--	--	--	--	140	ppm/K	

Product Comparison

Thermal	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Specific Heat							
--	--	1340	--	--	--	J/kg/°C	DIN 52612
50°C	--	--	1560	--	--	J/kg/°C	DSC
200°C	--	--	2150	--	--	J/kg/°C	DSC
Thermal Conductivity							
--	--	--	0.24	--	--	W/m/K	ASTM E1530
--	0.29	--	--	--	--	W/m/K	ISO 22007-4
--	--	0.25	--	--	--	W/m/K	DIN 52612
23°C ¹⁶	--	--	--	--	0.29	W/m/K	ISO 22007-4
23°C ¹⁷	--	--	--	--	0.32	W/m/K	ISO 22007-4
RTI Elec	--	--	--	--	260	°C	UL 746B
RTI Imp	--	--	--	--	180	°C	UL 746B
RTI Str	--	--	--	--	240	°C	UL 746B
Service Temperature							
long term	--	-60 to 250	--	--	--	°C	
Long Term	249	--	--	--	--	°C	
short term	--	< 310	--	--	--	°C	
Short Term	300	--	--	--	--	°C	
Electrical	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Surface Resistivity							
--	1.0E+16	--	> 1.9E+17	--	--	ohms	ASTM D257
--	--	1.0E+18	--	--	--	ohms	IEC 60093

Product Comparison

Electrical	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Volume Resistivity							
--	--	--	1.6E+17	--	--	ohms·cm	ASTM D257
23°C	4.9E+16	--	--	--	--	ohms·cm	ASTM D257
--	--	4.9E+16	--	--	--	ohms·cm	IEC 60093
23°C	--	--	--	--	1.0E+16	ohms·cm	IEC 60093
125°C	--	--	--	--	1.0E+15	ohms·cm	IEC 60093
275°C	--	--	--	--	1.0E+9	ohms·cm	IEC 60093
--	--	--	--	> 1.0E+13	--	ohms·m	IEC 62631-3-1
Dielectric Strength							
2.50 mm	--	--	17	--	--	kV/mm	ASTM D149
2.54 mm	25	--	--	--	--	kV/mm	ASTM D149
--	--	20	--	--	--	kV/mm	IEC 60243-1
0.0500 mm	--	--	--	--	200	kV/mm	IEC 60243-1
1.00 mm ¹⁸	--	--	--	24	--	kV/mm	IEC 60243-1
1.00 mm ¹⁹	--	--	--	35	--	kV/mm	IEC 60243-1
1.00 mm ²⁰	--	--	--	29	--	kV/mm	IEC 60243-1
2.00 mm	--	--	--	--	23	kV/mm	IEC 60243-1
Dielectric Constant							
60 Hz	--	--	3.06	--	--		ASTM D150
1 kHz	--	--	3.10	--	--		ASTM D150
1 MHz	--	--	3.05	--	--		ASTM D150
--	--	3.20	--	--	--		IEC 60250
1 kHz	2.80	--	--	--	--		IEC 60250
23°C, 50 Hz	--	--	--	--	3.00		IEC 60250
23°C, 1 kHz	--	--	--	--	3.10		IEC 60250
200°C, 50 Hz	--	--	--	--	4.50		IEC 60250
1 MHz, 2.00 mm	--	--	--	3.30	--		IEC 62631-2-1

Product Comparison

Electrical	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Dissipation Factor							
60 Hz	--	--	1.0E-3	--	--		ASTM D150
1 kHz	--	--	1.0E-3	--	--		ASTM D150
1 MHz	--	--	3.0E-3	--	--		ASTM D150
50 Hz	--	1.0E-3	--	--	--		IEC 60250
23°C, 1 MHz	3.0E-3	--	--	--	4.0E-3		IEC 60250
1 MHz, 2.00 mm	--	--	--	5.6E-3	--		IEC 62631-2-1
Comparative Tracking Index							IEC 60112
--	--	--	--	--	150	V	
3.00 mm ²¹	--	--	175	--	--	V	
Flammability	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Flame Rating							
0.8 mm	--	--	V-1	--	--		UL 94
1.6 mm	--	--	V-0	--	--		UL 94
3.0 mm	V-0	V-0	--	--	--		UL 94
6.0 mm	--	V-0	--	--	--		UL 94
3.2 mm	--	--	--	V-0	--		IEC 60695-11-10, -20
Glow Wire Flammability Index (2.0 mm)	--	--	--	960	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (2.0 mm)	--	--	--	875	--	°C	IEC 60695-2-13
Oxygen Index	--	--	37	--	--	%	ASTM D2863
Fill Analysis	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit	Test Method
Melt Viscosity							
400°C	--	--	--	--	350	Pa·s	ISO 11443
400°C, 1000 sec ⁻¹	--	--	440	--	--	Pa·s	ASTM D3835

Product Comparison

Additional Information

KetaSpire®
KT-820

Standard Packaging and Labeling

- KetaSpire resins are packaged in polyethylene buckets or cardboard boxes depending upon the order size. Individual packages will be plainly marked with the product, color, lot number, and net weight.

Injection	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit
Drying Temperature	--	--	150	< 150	120 to 150	°C
Drying Time	--	--	4.0	4.0 to 6.0	3.0 to 5.0	hr
Suggested Max Moisture	--	--	--	< 0.020	--	%
Hopper Temperature	--	--	--	--	< 100	°C
Rear Temperature	--	--	355	--	355	°C
Middle Temperature	--	--	365	--	360 to 365	°C
Front Temperature	--	--	370	--	370	°C
Nozzle Temperature	--	--	375	--	375	°C
Processing (Melt) Temp	--	--	--	380	--	°C
Mold Temperature	--	--	175 to 205	180	170 to 200	°C
Injection Rate	--	--	Fast	--	--	
Screw Compression Ratio	--	--	2.5:1.0 to 3.5:1.0	--	--	

Product Comparison

Injection Notes

KetaSpire®
KT-820

Drying

- KetaSpire resins must be dried completely prior to melt processing. Incomplete drying will result in defects in the formed part ranging from surface streaks to severe bubbling. Pellets can be dried on trays in a circulating air oven or in desiccating hopper dryer. Drying conditions recommended are 4 hours at 150°C (300°F) .

Injection Molding

- KetaSpire resins can be readily injection molded in most screw injection machines. A general purpose screw with a compression ratio in the range of 2.5 - 3.5 : 1 is recommended, as is minimum back pressure. Injection speeds should be as fast as possible, consistent with part appearance requirements. Mold temperatures in the range of 175°C to 205°C (350°F to 400°F) are suggested. Recommended starting point barrel temperatures are shown in the following table.

Runner: Die / nozzle >3mm, manifold >3.5mm

Gate: >1mm or 0.5 x part thickness

Important Notes:

1) Processing conditions quoted in our datasheets are typical of those used in our processing laboratories

- Data for mould shrinkage should be used for material comparison. Actual mould shrinkage values are highly dependent on part geometry, mould configuration, and processing conditions.
- Mould shrinkage differs for along flow and across flow directions. "Along flow" direction is taken as the direction the molten material is travelling when it exits the gate and enters the mould.
- Mould shrinkage is expressed as a percent change in dimension of a specimen in relation to mould dimensions.

2) Data are generated in accordance with prevailing national, international and internal standards, and should be used for material comparison. Actual property values are highly dependent on part geometry, mould configuration and processing conditions. Properties may also differ for along flow and across flow directions.

Detailed data available on our website www.victrex.com or upon request.

Extrusion	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit
Drying Temperature	--	--	--	170 to 180	--	°C
Drying Time	--	--	--	8.0 to 12	--	hr
Suggested Max Moisture	--	--	--	< 0.020	--	%
Hopper Temperature	--	--	--	60	--	°C
Cylinder Zone 1 Temp.	--	--	--	350 to 360	--	°C
Cylinder Zone 2 Temp.	--	--	--	350 to 360	--	°C
Cylinder Zone 3 Temp.	--	--	--	360 to 370	--	°C
Cylinder Zone 4 Temp.	--	--	--	360 to 370	--	°C
Cylinder Zone 5 Temp.	--	--	--	370 to 380	--	°C

Product Comparison

Extrusion	TECAPEEK® natural	SUSTAPEEK FG natural	KetaSpire® KT-820	VESTAKEEP® 4500 G	VICTREX™ PEEK POLYMER 450G™	Unit
Melt Temperature	--	--	--	380 to 390	--	°C