

Wolf Kunststoff ZEDEX® ZX-324V2T A3F PEEK, PTFE Modified

Category : Polymer , Thermoplastic , Polyketone , Polyetheretherketone (PEEK) , Polyetheretherketone, PEEK, PTFE-Filled

Material Notes:

Reduced friction; High wear resistance; High elasticity; Stress resistant
 Applications: Shipbuilding; Chemical Engineering; Automotive
 Technology; Machine Tools
 Information provided by Zedex

Order this product through the following link:

http://www.lookpolymers.com/polymer_Wolf-Kunststoff-ZEDEX-ZX-324V2T-A3F-PEEK-PTFE-Modified.php

Physical Properties	Metric	English	Comments
Density	1.33 g/cc	0.0480 lb/in ³	ISO 1183
Water Absorption	0.10 % @Temperature 23.0 °C	0.10 % @Temperature 73.4 °F	RMC 93%; DIN EN ISO 62
Moisture Absorption at Equilibrium	0.50 %	0.50 %	DIN EN ISO 62

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	100	100	DIN 53505
Hardness, Shore D	87	87	DIN 53505
Ball Indentation Hardness	175 MPa	25400 psi	DIN 2039
Tensile Strength at Break	90.0 MPa	13100 psi	DIN EN ISO 527
Tensile Strength	92.0 MPa	13300 psi	DIN EN ISO 527
Tensile Stress	26.0 MPa @Strain 1.00 %, Time 3.60e+6 sec	3770 psi @Strain 1.00 %, Time 1000 hour	DIN 53444
Tensile Strength, Yield	76.0 MPa	11000 psi	Elastic Limit
	92.0 MPa	13300 psi	DIN EN ISO 527
Elongation at Break	23.9 %	23.9 %	
	23.9 %	23.9 %	DIN EN ISO 527
Elongation at Yield	1.5 %	1.5 %	Elastic Yield Point
	5.7 %	5.7 %	Flexural; DIN EN ISO 178
	6.9 %	6.9 %	Elongation at Maximum Force; DIN EN ISO 527
	6.9 %	6.9 %	DIN EN ISO 527

Tensile Modulus Mechanical Properties	3.50 GPa Metric	508 ksi English	DIN EN ISO 527 Comments
Flexural Strength	110 MPa	16000 psi	Outer Fiber Stress at 3.5% Outer Fiber Strain; DIN EN ISO 178
	127 MPa	18400 psi	DIN EN ISO 178
Flexural Modulus	3.90 GPa	566 ksi	DIN EN ISO 178
Compressive Yield Strength	103 MPa	14900 psi	DIN EN ISO 604
Compressive Strength	76.0 MPa	11000 psi	Elastic Limit
	103 MPa	14900 psi	DIN EN ISO 604
	35.0 MPa	5080 psi	
	@Time 3.60e+7 sec	@Time 10000 hour	
	67.0 MPa	9720 psi	
	@Time 360000 sec	@Time 100 hour	
	81.0 MPa	11700 psi	
	@Time 36.0 sec	@Time 0.0100 hour	
	80.0 MPa	11600 psi	DIN EN ISO 604
	@Strain 3.50 %	@Strain 3.50 %	
Compressive Modulus	2.54 GPa	368 ksi	DIN EN ISO 604
Fatigue Strength	56.0 MPa	8120 psi	1 Hz
	@# of Cycles 1.00e+6	@# of Cycles 1.00e+6	
K Factor (ISO)	1.4 μm/km	1.4 μm/km	
	@Temperature 100 °C	@Temperature 212 °F	
	4.8 μm/km	4.8 μm/km	
	@Temperature 200 °C	@Temperature 392 °F	
	6.4 μm/km	6.4 μm/km	
	@Temperature 240 °C	@Temperature 464 °F	
	12.1 μm/km	12.1 μm/km	
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Charpy Impact Unnotched	NB	NB	EN ISO 179/1eU
Charpy Impact, Notched	0.630 J/cm ²	3.00 ft-lb/in ²	EN ISO 179/1eA
Coefficient of Friction, Dynamic	0.090	0.090	Dry Operation

Mechanical Properties	@Temperature 100 °C Metric	@Temperature 212 °F English	Comments
	@Temperature 20.0 °C	@Temperature 68.0 °F	Dry Operation
Coefficient of Friction, Static	0.13	0.13	Dry Operation
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Tensile Creep Modulus, 1000 hours	2500 MPa	363000 psi	At 1% Deformation; DIN 53444
Limiting Pressure Velocity	0.46666 MPa-m/sec	13323 psi-ft/min	v = 100m/min
	0.500 MPa-m/sec	14300 psi-ft/min	v = 200m/min
	0.66666 MPa-m/sec	19033 psi-ft/min	v = 10m/min
	1.0355 MPa-m/sec	29564 psi-ft/min	v = 1m/min
Compression Set	3.3 %	3.3 %	Elastic Compression Limit
	5.4 %	5.4 %	Nominal Compressive Yield Strain; DIN EN ISO 604
	5.4 %	5.4 %	Nominal Compressive Strain at Compressive Strength; DIN EN ISO 604

Thermal Properties	Metric	English	Comments
CTE, linear	62.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	34.4 $\mu\text{in}/\text{in}\cdot\text{°F}$	ISO E 830
	@Temperature <=100 °C	@Temperature <=212 °F	
	65.0 $\mu\text{m}/\text{m}\cdot\text{°C}$	36.1 $\mu\text{in}/\text{in}\cdot\text{°F}$	ISO E 831
	@Temperature <=150 °C	@Temperature <=302 °F	
Specific Heat Capacity	1.05 J/g-°C	0.251 BTU/lb-°F	DSC
Melting Point	340 °C	644 °F	DSC
Maximum Service Temperature, Air	115 °C	239 °F	Pressed Bushings
	250 °C	482 °F	Continuous
	260 °C	500 °F	Short Term (3h)
Deflection Temperature at 1.8 MPa (264 psi)	171 °C	340 °F	DIN EN ISO 75
Glass Transition Temp, Tg	146 °C	295 °F	DSC
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Volume Resistivity	6.00e+16 ohm-cm	6.00e+16 ohm-cm	IEC 93
Surface Resistance	6.80e+12 ohm	6.80e+12 ohm	IEC 93
Dielectric Constant	3.3 @Frequency 110 Hz	3.3 @Frequency 110 Hz	IEC 250
Dielectric Strength	27.0 kV/mm	686 kV/in	IEC 243
Dissipation Factor	0.0020	0.0020	IEC 112
	0.061 @Frequency 1.00 Hz	0.061 @Frequency 1.00 Hz	

Descriptive Properties	Value	Comments
Alignment Adjustment	4	Nominal Scale: 1, low; 10, high
Chemical Sterilization	10	Nominal Scale: 1, low; 10, high
Color	Beige	
Creep Resistance	5	Nominal Scale: 1, low; 10, high
Dimensional Stability with Thermal Expansion	5	Nominal Scale: 1, low; 10, high
FDA Compliant	Applicable	
Free from Silicon	Applicable	
Gamma-rays Radiation Sterilization	7	Nominal Scale: 1, low; 10, high
High Precision Bushings (negative clearance)	Applicable	
Injection Molded Parts	Applicable	
Machined Parts	Applicable	
Moist Heat Sterilization	10	Nominal Scale: 1, low; 10, high
Plastic Granules	Applicable	
Resistance Against dust, Dirt, Abrasive Substances	7	Nominal Scale: 1, low; 10, high
Resistance Against Hot Water	200	
Resistance to Chemicals	9	Nominal Scale: 1, low; 10, high
Resistant Against Disinfectant	Applicable	
Rods up to Øe (de)	Applicable	

Descriptive Properties ROHS/WEEE	Value Applicable	Comments
Sheets up to Maximum Thickness	Applicable	
Sliding Velocity	200	
Suitable for Outdoor Use	7	Nominal Scale: 1, low; 10, high
Suitable for Use in Water	Applicable	
Suitable for Vacuum	Applicable	
Tubes (hollow rods) up to Øe (de)	Applicable	
UV Rays Resistance	9	Nominal Scale: 1, low; 10, high
UV-Sterilization	7	Nominal Scale: 1, low; 10, high

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China