

Epratone® PPS BG

A high-performance plastic filled with an internal lubricant. The material has a low friction coefficient and a very high wear resistance. In addition, the mechanical strength, stiffness and hardness are high. Furthermore, it has a very high temperature resistance, excellent chemical resistance and good creep resistance, even at high temperatures.

Color	: dark blue	Sheet	: 5 t/m 100 mm
Mechanical	: difficult to machine	Rod	: 8 t/m 100 mm
Glue severability	: not possible	Tube	: 50 t/m 200 mm
Weldability	: not possible	Foil	:
Food contact	: FDA	Fixed formd	:

General properties	Test method	Value	Unit
ISO code	ISO 1183	PPS BG	
Density	ISO 1183-1	1,42	g/cm ³
Water absorption in Air (23°C / 50% RH)	ISO 62	0.05	%
Water absorption in Air (23°C / 100% RH)	ISO 62	0.2	%
Resistance to hot water	n/a	+	
Weather resistance	n/a	-	
Mechanical properties			
Elongation at break	ISO 527	3.5	%
Ball Indention Hardness	ISO 2039	160	MPa
Tensile modulus of elasticity	ISO 527	4000	MPa
Charpy impact strength - notched	ISO 179	4	kJ/m ²
Charpy impact strength - unnotched	ISO 179	25	kJ/m ²
Compressive stress at 1%	n/a	33	MPa
Coefficient of friction	n/a	0.2~0.35	
Thermal properties			
Melting temperature	n/a	280	°C
Max. allowable service temp (short period)	n/a	260	°C
Max. allowable service temp (long period)	n/a	220	°C
Min. service temperature	n/a	-20	°C
Coefficient of linear expansion	n/a	50	x10 ⁻⁶ m/(m*K)
Flammability	UL94	V0	
Electrical properties			
Dielectric Dissipation (@1MHz)	ISO 60250	0.003	Ω
Electric Strength	ISO 60243	24	kV/mm
Surface Resistivity	ISO 60093	>10 ¹⁴	Ω.cm
Optical properties			
Light transmission	ASTM D1003		%
Refractive index	ISO 489		

Date: 7-5-2020

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