

GATONE™ Poly Ether Ether Ketone 物性表一 Datasheets 1

项 目 Property		试验法 ASTM Method	单 位 Units	Poly Ether Ether Ketone				
				5300	5400	5600	5700	5330GF
一般 性 质	密度(比重) Specific Gravity	D792	-	1.3	1.3	1.3	1.3	1.5
	吸水率(24 hours) Water Absorption	D570	%	0.1	0.1	0.1	0.1	0.08
	熔融指数(380°C/5KG/6') Melt Volume Rate	D1238	cc / 10min	3~5	10~15	25~30	35-70	-
	成型收缩率-流动向,3.18mm 截面 Mold Shrinkage-flow direction	D955	%	1.00	0.90	0.80	0.80	0.30
	成型收缩率-垂直向,3.18mm 截面 Mold Shrinkage-vertical to flow	D955	%	1.38	1.30	1.20	1.20	-
	填充含量 Filler content	-	%	0	0	0	0	30
机 械 性 质	拉伸强度 Tensile Strength	D638	MPa	95	95	90	91	160
	拉伸模量 Tensile Modulus	D638	MPa	3800	3800	3500	3800	10000
	拉伸断裂伸长率 Tensile Elongation at Break	D638	%	>50	>50	>30	5	2.5
	弯曲强度 Flexural Strength	D790	MPa	160	160	145	145	260
	弯曲模量 Flexural Modulus	D790	MPa	3800	3800	3500	3600	10000
	洛氏硬度 Rockwell Hardness	D785	M scale	100	100	98	100	102
冲击强度(缺口) Impact Strength-Notched Izod	D256	J/m	60	60	50	44	95	
热 性 质	热变形温度 DTUL at 264 psi (1.82 MPa)	D648	°C	150	150	140	140	315
	玻璃转化温度 Glass Transition Temp.	D3482	°C	148	148	148	148	148
	连续使用温度 Continuous Use Temp.	UL-746B	°C	260	260	260	260	260
	线性热膨胀系数 Coefficient of Linear Thermal Expansion	D 696	10 ⁻⁵ /°C	5.3	5.3	4.5	4.5	1.3
电 气 性 质	介电强度 Dielectric Strength	D149	kV/mm	19	19	19	19	20
	介电常数 Dielectric Constant @ 60 Hz	D150	-	2.9	2.9	2.9	2.8	2.9
	介电损失 Dissipation Factor @ 60 Hz	D150	-	0.003	0.003	0.003	0.003	0.003
	体积电阻率 Volume Resistivity	D257	Ohm- cm	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶	>10 ¹⁶
	表面电阻率 Surface Resistivity	D257	Ω/SQ	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴	>10 ¹⁴
	相对电痕指数 Comparative Tracking Index	D3638	V	150	150	150	150	150
	耐电弧性 Arc Resistance	D495	sec	35	35	-	-	-
防 火 性	阻燃性 Flammability thickness	UL-94	-	V-0@0.8 mm	V-0@0.8 mm	V-0@0.8 mm	V-0@3.2 mm	V-0@0.8 mm
	临界含氧指数 Limiting Oxygen Index	D2863	%	40	40	40	40	45

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

GATONE™ Poly Ether Ether Ketone 物性表二 Datasheets 2

项 目 Property		试验法 ASTM Method	单 位 Units	Poly Ether Ether Ketone				
				5630GF	5330CF	5630CF	5330FC	5630FC
一般 性 质	密度(比重) Specific Gravity	D792	-	1.5	1.4	1.4	1.42	1.42
	吸水率(24 hours) Water Absorption	D570	%	0.08	0.08	0.08	0.08	0.08
	熔融指数(380°C/5KG/6') Melt Volume Rate	D1238	cc / 10min	-	-	-	-	-
	成型收缩率-流动向,3.18mm 截面 Mold Shrinkage-flow direction	D955	%	0.30	0.05	0.05	0.35	0.35
	成型收缩率-垂直向,3.18mm 截面 Mold Shrinkage-vertical to flow	D955	%	-	0.50	0.50	-	-
	填充含量 Filler content	-	%	30	30	30	30	30
机 械 性 质	拉伸强度 Tensile Strength	D638	MPa	160	220	220	140	140
	拉伸模量 Tensile Modulus	D638	MPa	10000	22000	22000	12000	12000
	拉伸断裂伸长率 Tensile Elongation at Break	D638	%	2.5	2.5	2.5	2.5	2.5
	弯曲强度 Flexural Strength	D790	MPa	260	350	350	210	210
	弯曲模量 Flexural Modulus	D790	MPa	10000	18000	18000	11100	11100
	洛氏硬度 Rockwell Hardness	D785	M scale	102	105	105	90	90
热 性 质	冲击强度(缺口) Impact Strength-Notched Izod	D256	J/m	95	80	80	50	50
	热变形温度 DTUL at 264 psi (1.82 MPa)	D648	°C	315	315	315	315	315
	玻璃转化温度 Glass Transition Temp.	D3482	°C	148	148	148	148	148
	连续使用温度 Continuous Use Temp.	UL-746B	°C	260	260	260	260	260
电 气 性 质	线性热膨胀系数 Coefficient of Linear Thermal Expansion	D 696	10 ⁻⁵ /°C	1.3	3.16	3.16	1.14	1.14
	介电强度 Dielectric Strength	D149	kV/mm	20	-	-	-	-
	介电常数 Dielectric Constant @ 60 Hz	D150	-	2.9	-	-	-	-
	介电损失 Dissipation Factor @ 60 Hz	D150	-	0.003	-	-	-	-
	体积电阻率 Volume Resistivity	D257	Ohm- cm	>10 ¹⁶	-	-	-	-
	表面电阻率 Surface Resistivity	D257	Ω/SQ	>10 ¹⁴	-	-	-	-
	相对电痕指数 Comparative Tracking Index	D3638	V	150	-	-	-	-
防 火 性	耐电弧性 Arc Resistance	D495	sec	-	-	-	-	-
	阻燃性 Flammability thickness	UL-94	-	V-0@0.8m m	V-0@0.8m m	V-0@0.8m m	V-0@0.8m m	V-0@0.8m m
	临界含氧指数 Limiting Oxygen Index	D2863	%	45	45	45	30	30

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.