



名称:  
牌号:

PBT  
D01

产品简介 Product Description	主要应用 Applications
·PBT 聚对苯二甲酸丁二醇酯基础树脂	·挤出工艺 Extrusion molding
·高粘度，抗水解 High Viscosity, Hydrolysis Resistance	·改性工程塑料或高速挤出光纤松套管等 Modified engineering plastics or optical fiber loose tube, etc.

性能 Properties	测试标准 Test Method	测试条件 Test Condition	单位 Unit	典型值 Typical Values
<b>物理性能 Physical properties</b>				
密度 Specific Gravity	ASTM D792	/	g/cm <sup>3</sup>	1.31
特性粘度 Intrinsic Viscosity	ASTM D445	/	dl/g	1.30
熔体流动速率 Intrinsic Viscosity	ASTM D1238	250℃/2.16kg	g/cm <sup>3</sup>	7-15
饱和吸水率 Water absorption, equilibrium in water at 23℃	ASTM D570	Water at 23℃	%	<0.05
邵氏硬度 Shore hardness	ASTM D2240		D	75
<b>机械性能 Mechanical properties</b>				
拉伸强度 Yield strength	ASTM D638	50mm/min	MPa	55
屈服伸长率 Elongation at yield	ASTM D638	50mm/min	%	5.4
断裂伸长率 Tensile Strain at break	ASTM D638	50mm/min	%	>250
拉伸模量 Tensile Modulus	ASTM D638	5mm/min	MPa	2300
弯曲强度 Flexural Strength	ASTM D790	2mm/min	MPa	75
弯曲模量 Flexural Modulus	ASTM D790	2mm/min	MPa	2250
悬臂梁缺口冲击强度 Izod Impact, notched	ASTM D256	23℃	kJ/m <sup>2</sup>	5
悬臂梁缺口冲击强度 Izod Impact, notched	ASTM D256	-40℃	kJ/m <sup>2</sup>	4.5
悬臂梁无缺口冲击强度 Izod Impact, unnotched	ASTM D256	23℃	kJ/m <sup>2</sup>	160
<b>热性能 Thermal properties</b>				
熔点 Melting point	DSC Way	DSC	℃	224
热变形温度 Heat deflection temperature	ASTM D648	1.80MPa, 4.0mm	℃	55
线性膨胀系数 (23-80)℃ Coefficient of linear thermal expansion, longitudinal (23-80)℃	ASTM D696		10 <sup>-6</sup> /K	70

**说明:** 以上数据是典型值，不是保证值。根据模具设计，例如浇口类型，浇口分布，浇口数量的不同，注塑工艺和制件厚度的不同，测试结果会有波动。不同的颜色，测试结果也会有波动。

**Note:** The data above is typical value for reference, not guarantee value. The data will vary with tool design such as gate type , gate location, gate number, injection molding process and part thickness. The data will vary with different color as well.

INJECTION MOLDING/ 注塑成型加工	
典型加工条件 Processing Conditions	参考范围 Range
预干燥 Pre-Dry needed	120-140℃, 3-4h
熔体温度 Melt Temperature	235-250℃
射嘴温度 Nozzle Temperature	240℃
模具温度 Mold Temperature	60-80℃
注射压力 Injection Pressure	40-100MPa
背压 Back Pressure	4-15MPa
螺杆速度 Screw Speed	<100RPM

COMPOUNDING EXTRUSION /改性挤出成型加工	
典型加工条件 Processing Conditions	参考范围 Range
预干燥 Pre-Dry needed	120-140℃, 3-4h
熔体温度 Melt Temperature	220-250℃
螺杆一区温度（靠近喂料口） Extruder Temperature ZONE1, close to feeder	210-245℃
螺杆二区温度 Extruder Temperature ZONE2	210-245℃
螺杆三区温度 Extruder Temperature ZONE3	210-245℃
螺杆四区温度 Extruder Temperature ZONE4	210-245℃
螺杆五区温度（靠近口模） Extruder Temperature ZONE5, close to die	210-245℃
螺杆速度 Screw Speed	≤900RPM

**说明：** 以上数值仅供参考使用，可根据不同机型、不同模具以及产品要求，对上述工艺做适当调整。

**Note:** The above process condition is only for reference. The actual process should be adjusted according to different type of machine, mold design and product design.