COOLPOLY® E5521 (PRELIMINARY)

COOLPOLY®

CoolPoly E series of thermally conductive plastics transfers heat, is lightweight, netshape moldable and allows design freedom in applications previously restricted to metals.

产品信息

树脂鉴别	LCP	ISO 1043
制品标识码	>LCP<	ISO 11469

机械性能

拉伸模量	7100	MPa	ISO 527-1/-2
拉伸断裂应力, 5mm/min	32	MPa	ISO 527-1/-2
断裂伸长率, 5mm/min	0.7	%	ISO 527-1/-2
弯曲模量	11100	MPa	ISO 178
弯曲强度	56	MPa	ISO 178
简支梁无缺口冲击强度, 23°C	3.4	kJ/m²	ISO 179/1eU
简支梁缺口冲击强度, 23°C	2.5	kJ/m²	ISO 179/1eA

热性能

热变形温度, 1.8 MPa	198	°C	ISO 75-1/-2
固态导热系数, 顺流	34	W/(m K)	ISO 22007-2
固态导热系数, 贯通面	4.5	W/(m K)	ISO 22007-2

其它性能

密度	1750	kg/m³	ISO 1183

注塑

建议干燥	是	
干燥温度	150	°C
干燥时间，除湿干燥机	4 - 6	h
加工前水分含量	≤ 0.01	%
最优熔体温度	370	°C
最低熔体温度***	350	°C
最高熔体温度	390	°C
螺杆最大切线速度	0.2 - 0.3	m/s
最优模具温度	140	°C
最低模具温度	100	°C
最高模具温度	170	°C
背压	0.35	MPa

特性

加工方法	注塑
特殊性能	静电耗散, 特殊外观, 低磨损/低摩擦, 高流动性, 低翘曲

Revised: 2025-12-22 Source: Celanese Materials Database

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其他信息

注塑

Processing

A low compression screw (3:1 or less) is recommended. Use a free flowing nozzle and free-flowing non-return valve with good sealing ability. Large reverse taper nozzle is suggested. Minimize suck-back. Material is moisture sensitive. Screw speed 75-150 rpm with cusion of 1-1.3 cm.

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The above data are preliminary and are subject to change as additional data are developed on subsequent lots.
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