

# DuPont™ Surlyn® 9970 Ionomer Resin, Zinc

Polymer,Thermoplastic,Ionomer,Ionomer, Molded

DuPont

产品说明

Surlyn® 9970 thermoplastic resin is an advanced ethylene/methacrylic acid (E/MAA) copolymer, in which the MAA acid groups have been partially neutralized with zinc ions. The amount of MAA and neutralization levels for this grade result in excellent clarity, good tear resistance and a high melt flow index (14) compared with other grades of Surlyn®. The resin can be injection molded. It complies with the provisions of U.S. Food and Drug Administration (FDA) Title 21 Code of Regulations 177:1330 - ionomer resins.Data provided by the manufacturer.

物理性能	额定值 (公制)	额定值 (英制)	测试方法
密度	0.940 g/cc	0.0340 lb/in³	ASTM D792
熔体流动速率	14 g/10 min @ Load 2.16 kg, Temperature 190 °C	14 g/10 min @ Load 4.76 lb, Temperature 374 °F	condition E; ASTM D1238
机械性能	额定值 (公制)	额定值 (英制)	测试方法
肖氏硬度 (邵氏 D)	62	62	ASTM D2240
极限抗拉强度	22.1 MPa	3210 psi	ASTM D638
抗张强度(屈服)	11.0 MPa	1600 psi	50 mm/min cross speed; ASTM D638
伸长率 (断裂)	460 %	460 %	ASTM D638
弯曲模量	0.190 GPa	27.6 ksi	ASTM D790
悬臂梁缺口冲击强度	NB	NB	ASTM D256
拉伸冲击强度	760 kJ/m²	362 ft-lb/in²	ASTM D1822S
磨损	120	120	NBS Index; ASTM D1630
热性能	额定值 (公制)	额定值 (英制)	测试方法
线性热膨胀系数	140 µm/m-°C @ Temperature -20.0 - 32.0 °C	77.8 µin/in-°F @ Temperature -4.00 - 89.6 °F	ASTM D696
导热系数	0.240 W/m-K	1.67 BTU-in/hr-ft²-°F	
熔融温度	88.0 °C	190 °F	DTA
载荷下热变形温度(0.46 MPa)	40.0 °C	104 °F	ASTM D648
维卡软化温度	61.0 °C	142 °F	Rate B, ASTM D1525-70
Flame Spread	27.9 mm/min	1.10 in/min	ASTM D635
光学性能	额定值 (公制)	额定值 (英制)	测试方法
雾度	7.0 % @ Thickness 6.40 mm	7.0 % @ Thickness 0.252 in	ASTM D1003A
光泽度	85 %	85 %	20° per ASTM D523-6