



CoolPoly® E8103 Thermally Conductive Thermoplastic Elastomer (TPE)

CoolPoly E series of thermally conductive plastics transfers heat, a characteristic previously unavailable in injection molding grade polymers. CoolPoly is lightweight, netshape moldable and allows design freedom in applications previously restricted to metals. The E series is electrically conductive and provides inherent EMI/RFI shielding characteristics.

Thermal	SI/Metric		Testing Standard
Thermal Conductivity	5 W/mK		ASTM E1461
Thermal Diffusivity	0.0249 cm ² /sec		ASTM E1461
Specific Heat	1.94 J/g°C		ASTM E1461
Mechanical	SI/Metric	English	Testing Standard
Tensile Strength	1.28 MPa	186 psi	ISO 37
Nominal Strain @ Break	57 %	57 %	ISO 37
Tear Strength			
Method B	14 kN/m	80 pli	ISO 34-1
Physical	SI/Metric	English	Testing Standard
Density	1.13 g/cc	0.0408 lb/in ³	ISO 1183
Hardness	38 Shore A	38 Shore A	ISO 48
Mold Shrinkage			
Flow	1.5 %	0.015 in/in	ASTM D551
Cross-Flow	2.1 %	0.021 in/in	ASTM D551

CoolPoly® is a proprietary composition of Cool Polymers®, Inc. U.S. and foreign patents pending. The testing and product data provided in this data sheet are preliminary in nature and may not be accurate. The data contained herein are provided for preliminary informational purposes only and for initial evaluation of the product. As a result, they are not appropriate for the purpose of developing a final specification and should not be relied on for such specification purposes. Cool Polymers extends no warranties, makes no representations and assumes no responsibility as to the accuracy or suitability of this information or this product for any purchaser's or user's use or for any consequence of its use. Cool Polymers disclaims any warranty of merchantability or warranty of fitness for any particular use. All statements, technical information and recommendations contained herein are based on seller's or manufacturer's tests and the tests of others. Judgement as to the suitability of information herein for the user's purposes are necessarily the user's responsibility. Users shall determine the suitability of the products for the intended application.