



CoolPoly® D8102 Thermally Conductive Thermoplastic Elastomer (TPE)

CoolPoly D8102 is a thermally conductive injection molding resin based on a thermoplastic elastomer (TPE) matrix. CoolPoly D8102 is electrically insulative. Thermally conductive polymers like CoolPoly D8102 cool faster than standard injection molding grade resins.

Typical Injection Molding Conditions

Temperature Settings	SI /Metric	English
Rear Zone	180 - 205 °C	350 - 400 °F
Center Zone	190 - 215 °C	370 - 420 °F
Front Zone	195 - 225 °C	380 - 440 °F
Nozzle	195 - 225 °C	380 - 440 °F
Melt	190 - 225 °C	370 - 440 °F
Mold	20 - 50 °C	70 - 120 °F

Pressure Settings

Injection	2.1 - 6.9 MPa	300 - 1000 psi
Hold	0.7 - 3.5 MPa	100 - 500 psi
Back	0 - 0.7 MPa	0 - 100 psi

Injection Settings

Fill	moderate - fast mm/sec	moderate - fast in/sec
Screw	50 - 150 rpm	50 - 150 rpm
cushion	0 - 0.5 cm	0 - 0.2 inch

Drying Conditions

Time & Temperature	1-2hr @ 65 °C	1-2hr @ 150 °F
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Additional Information

A low compression screw (less than 2:1) is recommended

Drying is required only to drive off surface moisture as the material is not hydroscopic and does not absorb any moisture.

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