

# F5134T2-4

## **Producer Services**

### **FEATURES & BENEFITS**

- 20% talc filled polypropylene compound
- Black color
- High stiffness and heat deflection performance
- Excellent processability
- Approved to GM specification GMW16528
- Approved to Delphi specification SD2-189 paragraph 4.3

### **TARGET MARKETS & APPLICATIONS**

• Automotive injection molding applications

PROPERTIES	TEST METHODS	UNITS	DATA
Specific Gravity	ASTM D792	g/cm³	1.04
Melt Flow Rate	ASTM D1238, 230°C/2.16 kg	g/10 min	8
Tensile Strength at Yield	ASTM D638, 23°C	MPa	33
Tensile Elongation at Yield	ASTM D638, 23°C	%	4
Tensile Elongation at Break	ASTM D638, 23°C	%	30
Flexural Modulus	ASTM D790, 23°C	MPa	2500
Notched Izod Impact	ASTM D256, 23°C	J/m	35
Heat Deflection Temperature	ASTM D648, 0.45 MPa	°C	121
Heat Deflection Temperature	ASTM D648, 1.82 MPa	°C	68
Flammability	FMVSS 302, 3.2 mm thick	mm/min	< 100
Linear Shrinkage Range*	3.2 mm wall thickness	mm/mm	0.010 - 0.014

<sup>\*</sup> This method gives comparable data based on standard specimens and cannot predict absolute values in actual molded parts with varying flow paths, wall thicknesses, pressure gradients and process condition

#### **PROCESSING**

These are the recommended starting conditions for injection molding PolyOne's talc filled polypropylene compounds. This product does not have to be dried, but for critical appearance parts, pre-drying for at least 1 hour at a temperature of 85°C (180°F) is recommended.

Due to the complex nature of the injection molding process and the vast differences in equipment and tooling, it is strongly recommended that processors make any adjustments to these conditions that are deemed necessary to produce acceptable finished parts, and optimize processing. Long residence time may require lower barrel set points.

INJECTION PARAMETER	RECOMMENDED SET POINT		
Rear Zone Temperature	215-245°C (420-470°F)		
Middle Zone Temperature	220-250°C (430-480°F)		
Front Zone Temperature	225-255°C (440-490°F)		
Nozzle Temperature	230-260°C (450-500°F)		
Purge Temperature	260°C (500°F)		
Mold Temperature	15-65°C (60-150°F)		
Injection Speed	Maximum setting before flash or burn marks appear.		
Change to Pack Position	At 95% full part.		
Pack Pressure	Enough to fill out remaining 5% without flash or sink.		
Pack Time	Equal to gate freeze time.		
Hold Time	Longest possible without delaying plasticizing.		
Cooling Time	Until ejector does not leave an indentation.		

For additional information, please contact PolyOne Corporation at +1-888-721-4242 or visit www.polyone.com.

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