reSound™ OM 5540-90N

Thermoplastic Elastomer

Key Characteristics

Product Description			
reSound™ OM 5540-90N is a specialty bio-renewable thermoplastic elastomer material with 40% bio content, designed for overmolding onto PP.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Features	• Specialty Grade		
Uses	• Consumer Applications	• Overmolding	• Sporting Goods
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.880	0.880	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Strength [2, 3] (Break, 73°F (23°C))	914 psi	6.30 MPa	ASTM D412
Tensile Elongation [2, 3] (Break, 73°F (23°C))	350 %	350 %	ASTM D412
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	89	89	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	7.80 Pa·s	7.80 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	340 to 390 °F	171 to 199 °C
Front Temperature	360 to 440 °F	182 to 227 °C
Nozzle Temperature	360 to 440 °F	182 to 227 °C
Mold Temperature	80 to 120 °F	27 to 49 °C
Back Pressure	100 to 200 psi	0.689 to 1.38 MPa
Screw Speed	25 to 100 rpm	25 to 100 rpm

Injection Notes

Purge thoroughly before and after use of this product with a low flow (0.5 - 2.5 MFR) polyethylene (PE) or polypropylene (PP).

Generally, the barrel should be emptied if it is idle for periods of 8 - 10 minutes or longer.

Drying is not Required

Notes

[1] Typical values are not to be construed as specifications.

[2] Die C

[3] 2 hr

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