Versaflex™ OM 2262

Thermoplastic Elastomer

Key Characteristics

Product Description			
Versaflex™ OM 2262 is a performance overmolding grade with general FDA compliance. This product is designed for both insert and two-shot molding onto Eastman Tritan™ copolyester as well as ABS, PC, and PC/ABS substrates.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Good Adhesion • Good Colorability	• Good Flow • Good Moldability	• Pleasing Surface Appearance
Uses	• Consumer Applications • Drink Lids • Household Goods	• Kitchenware • Non-specific Food Applications • Overmolding	• Soft Touch Applications
Agency Ratings	• FDA Unspecified Rating [1]		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [2]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Specific Gravity	1.18	1.18	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [3, 4] (100% Strain, 73°F (23°C))	370 psi	2.55 MPa	ASTM D412
Tensile Strength [3, 4] (Break, 73°F (23°C))	850 psi	5.86 MPa	ASTM D412
Tensile Elongation [3, 4] (Break, 73°F (23°C))	680 %	680 %	ASTM D412
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness			ASTM D2240
Shore A, 10 sec, 70°F (21°C)	65	65	
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			ASTM D3835
392°F (200°C), 11200 sec^-1	19.8 Pa·s	19.8 Pa·s	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	125 to 130 °F	51.7 to 54.4 °C
Drying Time	3.0 to 4.0 hr	3.0 to 4.0 hr
Suggested Max Moisture	0.10 %	0.10 %
Suggested Max Regrind	20 %	20 %
Rear Temperature	330 to 370 °F	166 to 188 °C
Middle Temperature	350 to 390 °F	177 to 199 °C
Front Temperature	360 to 400 °F	182 to 204 °C
Nozzle Temperature	380 to 420 °F	193 to 216 °C
Processing (Melt) Temp	380 to 420 °F	193 to 216 °C

Injection	Typical Value (English)	Typical Value (SI)
Mold Temperature	50.0 to 90.0 °F	10.0 to 32.2 °C
Back Pressure	0.00 to 80.0 psi	0.00 to 0.552 MPa
Screw Speed	50 to 100 rpm	50 to 100 rpm

Injection Notes

Color concentrates with EVA or LDPE carrier are most suitable for coloring Versaflex™ OM 2262. Typical letdown ratios are 50:1 to 25:1 - loading levels should be as low as possible to minimize the effect on adhesion. A high color match consistency can be obtained by the use of precolored compounds available from GLS. Concentrates based on PVC should not be used. The final determination of color concentrate suitability should be determined by customer trials.

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

Regrind levels up to 20% can be used with Versaflex™ OM 2262 with minimal property loss, provided that the regrind is free of contamination. To minimize losses during molding, the melt temperature should remain as low as possible. The final determination of regrind effectiveness should be determined by the customer.

Versaflex™ OM 2262 has good melt stability. Maximum residence times may vary, depending on the size of the barrel. Generally, the barrel should be emptied if it is idle for periods of 5 - 8 minutes or longer.

Injection Speed: 0.5 to 2.5 in/sec
1st Stage - Boost Pressure: 200 to 900 psi
2nd Stage - Hold Pressure: 20-40% of Boost
Hold Time (Thick Part): 4 to 10 sec
Hold Time (Thin Part): 1 to 4 sec

Notes

[1] Please contact GLS Thermoplastic Elastomers for a copy of the FDA compliance letter.

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

[3] Die C

[4] 2 hr

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