Versaflex™ OM 9140 Translucent

Thermoplastic Elastomer

Key Characteristics

Product Description

Versaflex OM 9140 Translucent is designed for overmolding onto a wide variety of substrates including PC, ABS, M-ABS, SAN, M-MBS, ASA, COPE, HIPS and PPE/PS blends and may be appropriate where FDA compliance is required.

New Product. Commercial specifications have not been established.

- Bonds to a Variety Of Substrates
- Rubbery Feel
- Good surface Aesthetics
- Soft Touch
- Short cycle time
- Good UV resistance

General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific	• Europe	
Features	• Good Moldability • Good Processability	• Good Processing Stability • Good Surface Finish	• UV Resistant
Uses	• Consumer Applications • Electrical/Electronic Applications	• Flexible Grips • Overmolding	• Power/Other Tools
Agency Ratings	• FDA Unspecified Rating [1]		
RoHS Compliance	• RoHS Compliant		
Appearance	• Translucent		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [2]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	0.900	0.900	ISO 1183
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress			ISO 37
100% Strain, 0.0787 in (2.00 mm)	181 psi	1.25 MPa	
Tensile Stress			ISO 37
300% Strain, 0.0787 in (2.00 mm)	392 psi	2.70 MPa	
Tensile Stress (Break, 0.0787 in (2.00 mm))	943 psi	6.50 MPa	ISO 37
Tensile Elongation			ISO 37
Break, 0.0787 in (2.00 mm)	930 %	930 %	
Compression Set (73°F (23°C), 72 hr)	35 %	35 %	ISO 815
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Shore Hardness (Shore A, 3 sec)	40	40	ISO 868
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity			Internal Method
392°F (200°C), 11200 sec^-1	9.20 Pa·s	9.20 Pa·s	

Additional Information

Peel Strength (right angle) according to DIN EN 1464 - pull rate:100mm/min

- From ABS: 40 N;
- From COPE: 40 N;
- From HIPS: 40 N;
- From M-MBS: 45 N;
- From SAN: 40 N;
- From ASA: 35 N;
- From PPE/PS blends: 50N
- From M-ABS: 45N;
- From PC: 40N.

The adhesion property is considered good when the peel strength is above 30N.

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Suggested Max Regrind	20 %	20 %
Rear Temperature	356 to 374 °F	180 to 190 °C
Middle Temperature	374 to 392 °F	190 to 200 °C
Front Temperature	392 to 428 °F	200 to 220 °C
Nozzle Temperature	392 to 446 °F	200 to 230 °C
Mold Temperature	68 to 104 °F	20 to 40 °C
Back Pressure	25.0 to 50.0 psi	0.172 to 0.345 MPa
Screw Speed	75 to 125 rpm	75 to 125 rpm

Injection Notes

Color concentrates with polyethylene (PE) or EVA carriers are most suitable for coloring Versaflex OM 9140 Translucent. 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. trials.

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

Regrind levels up to 20% can be used with Versaflex OM 9140 Translucent 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 9140 Translucent 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.

Drying is not Required

Injection Speed: 0.5 to 3 in/sec
1st Stage - Boost Pressure: 35 to 65 bars.
2nd Stage - Hold Pressure: 70% of Boost
Hold Time (Thick Part): 4 to 10 sec
Hold Time (Thin Part): 1 to 3 sec

Notes

[1] Product rating may be influenced by end product design and/or conditions of use. Please contact GLS Thermoplastic Elastomers for information addressing FDA compliance.

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

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