

PolyOne Versaflex™ OM 1245X-1 Thermoplastic Elastomer (TPE)

Category : Polymer , Thermoplastic , Elastomer, TPE

Material Notes:

The Versaflex™ OM 1245X-1 is designed for overmolding onto polycarbonate (PC), ABS, and PC/ABS substrates. - Excellent Bond to PC, ABS, PC/ABS - Rubbery Feel - Soft TouchColor concentrates with EVA, polypropylene (PP) or LDPE carrier are most suitable for coloring Versaflex™ OM 1245X-1. 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 polypropylene (PP). Regrind levels up to 20% can be used with Versaflex™ OM 1245X-1 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 the regrind effectiveness should be determined by the customer. Versaflex™ OM 1245X-1 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. Suggested Dewpoint: -40°F Injection Speed: 1 to 3 in/sec 1st Stage - Boost Pressure: 100 to 800 psi 2nd Stage - Hold Pressure: 30% of Boost Hold Time (Thick Part): 4 to 10 sec Hold Time (Thin Part): 1 to 3 sec Information provided by PolyOne

Order this product through the following link:

http://www.lookpolymers.com/polymer_PolyOne-Versaflex-OM-1245X-1-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments
Specific Gravity	0.968 g/cc	0.968 g/cc	ASTM D792
Viscosity	13000 cP	13000 cP	ASTM D3835
	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	
Maximum Moisture Content	0.020 - 0.030	0.020 - 0.030	
Linear Mold Shrinkage, Flow	0.014 - 0.018 cm/cm	0.014 - 0.018 in/in	ASTM D955
Melt Flow	1.0 - 12 g/10 min	1.0 - 12 g/10 min	ASTM D1238
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	
	45 - 65 g/10 min	45 - 65 g/10 min	ASTM D1238
	@Load 5.00 kg, Temperature 200 °C	@Load 11.0 lb, Temperature 392 °F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	46	46	10 sec; ASTM D2240
	@Temperature 23.0 °C	@Temperature 73.4 °F	
	6.11 MPa	886 psi	

Tensile Strength at Break Mechanical Properties	Metric @ Temperature 23.0 °C	English @ Temperature 73.4 °F	Die C2 hr; ASTM D412 Comments
Tensile Stress	1.79 MPa @Strain 100 %, Temperature 23.0 °C	260 psi @Strain 100 %, Temperature 73.4 °F	Die C2 hr; ASTM D412
	3.50 MPa @Strain 300 %, Temperature 23.0 °C	508 psi @Strain 300 %, Temperature 73.4 °F	Die C2 hr; ASTM D412
Elongation at Break	490 % @Temperature 23.0 °C	490 % @Temperature 73.4 °F	Die C2 hr; ASTM D412
Compression Set	31 % @Temperature 23.0 °C, Time 79200 sec	31 % @Temperature 73.4 °F, Time 22.0 hour	ASTM D395B

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	160 - 193 °C	320 - 379 °F	
Middle Barrel Temperature	177 - 193 °C	351 - 379 °F	
Front Barrel Temperature	182 - 204 °C	360 - 399 °F	
Nozzle Temperature	193 - 216 °C	379 - 421 °F	
Melt Temperature	182 - 216 °C	360 - 421 °F	
Mold Temperature	21.1 - 32.2 °C	70.0 - 90.0 °F	
Drying Temperature	43.3 - 46.1 °C	110 - 115 °F	
Dry Time	3.00 - 4.00 hour	3.00 - 4.00 hour	
Back Pressure	0.000 - 0.862 MPa	0.000 - 125 psi	
Screw Speed	75 - 125 rpm	75 - 125 rpm	

Descriptive Properties	Value	Comments
Agency Ratings	FDA Unspecified Rating	
Appearance	Translucent	
Features	Good Processing Stability	
	Soft	
Forms	Pellets	

Generic Material Descriptive Properties	TPE Value	Comments
Generic Name	Thermoplastic Elastomer (TPE)	
Manufacturer / Supplier	GLS Thermoplastic Elastomers	
Processing Method	Injection Molding	
Regional Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	
	South America	
RoHS Compliance	RoHS Compliant	
Suggested Max Regrind	20%	
Uses	Consumer Applications	
	Electrical/Electronic Applications	
	Flexible Grips	
	Overmolding	
	Soft Touch Applications	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China