

## PolyOne Versaflex™ OM 9-801N Thermoplastic Elastomer (TPE)

Category: Polymer, Thermoplastic, Elastomer, TPE

## **Material Notes:**

Versaflex™ OM 9-801N is designed for overmolding onto a wide variety of substrates including PC, ABS, PC/ABS, HIPS, PPO, acetal, acrylic and copolyester. - Bonds to a Variety Of Substrates - Rubbery Feel - Soft Touch - Very Good Surface AestheticsColor concentrates with polyethylene (PE) or EVA carriers are most suitable for coloring Versaflex™ OM 9-801N. 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 9-801N 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 9-801N 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: 500 to 900 psi 2nd Stage - Hold Pressure: 70% of Boost Hold Time (Thick Part): 4 to 10 sec Hold Time (Thin Part): 1 to 3 secInformation provided by PolyOne

Order this product through the following link: http://www.lookpolymers.com/polymer\_PolyOne-Versaflex-OM-9-801N-Thermoplastic-Elastomer-TPE.php

Physical Properties	Metric	English	Comments
Specific Gravity	1.04 g/cc	1.04 g/cc	ASTM D792
	15600 cP	15600 cP	
Viscosity	@Shear Rate 11200 1/s, Temperature 200 °C	@Shear Rate 11200 1/s, Temperature 392 °F	ASTM D3835
Linear Mold Shrinkage, Flow	0.0030 - 0.0090 cm/cm	0.0030 - 0.0090 in/in	ASTM D955
Melt Flow	22 g/10 min	22 g/10 min	
	@Load 2.16 kg, Temperature 190 °C	@Load 4.76 lb, Temperature 374 °F	ASTM D1238
	100 g/10 min	100 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	47	47	10 sec; ASTM D2240	
Tensile Strength at Break	4.49 MPa	651 psi	Die C2 hr; ASTM D412	
	@Temperature 23.0 °C	@Temperature 73.4 °F		
	1.45 MPa	210 psi		



Mechanical Properties	Metric in 100 %, Temperature 23.0 °C	English, 100 %, Temperature 73.4 °F	Comments D412
	1.80 MPa	261 psi	
	@Strain 300 %, Temperature 23.0 °C	@Strain 300 %, Temperature 73.4 °F	Die C2 hr; ASTM D412
Elongation at Break	820 %	820 %	Die C2 hr; ASTM D412
	@Temperature 23.0 °C	@Temperature 73.4 °F	
Tear Strength	17.5 kN/m	99.9 pli	ASTM D624
Compression Set	43 %	43 %	
	@Temperature 23.0 °C, Time 79200 sec	@Temperature 73.4 °F, Time 22.0 hour	ASTM D395B

Thermal Properties	Metric	English	Comments	
Flammability, UL94	НВ	НВ	UL 94	
	@Thickness 1.50 mm	@Thickness 0.0591 in		

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	182 - 193 °C	360 - 379 °F	
Middle Barrel Temperature	188 - 202 °C	370 - 396 °F	
Front Barrel Temperature	193 - 204 °C	379 - 399 °F	
Nozzle Temperature	199 - 218 °C	390 - 424 °F	
Mold Temperature	21.1 - 37.8 °C	70.0 - 100 °F	
Back Pressure	0.172 - 0.345 MPa	24.9 - 50.0 psi	
Screw Speed	75 - 125 rpm	75 - 125 rpm	

Descriptive Properties	Value	Comments
Agency Ratings	FDA Unspecified Rating	
	UL 94 .QMFZ2.E76261	
Appearance	Natural Color	
Automotive Specifications	FMVSS 302	
Features	Good Surface Finish	
Forms	Pellets	



Descriptive Properties	Value	Comments		
Generic Name	Thermoplastic Elastomer (TPE)	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	Flexible Grips			
	General Purpose			
	Overmolding			
	Soft Touch Applications			
	Sporting Goods			

## **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