



VERSAFLEX™ OM 1040X-1

GLS Corp., Thermoplastic Elastomers Div. - Thermoplastic Elastomer

Tuesday, April 29, 2008

General Information

Product Description

The Versaflex® OM 1040X-1 is a cost-effective overmolding TPE with very good adhesion to PC or ABS-based plastics.

General

Material Status	• Commercial: Active	
Regional Availability	• Africa & Middle East • Asia Pacific • Europe	• North America • South America
Features	• Adhesion, Good • Appearance, Pleasing Surface	• Bondability • Soft
Uses	• Overmolding	
Appearance	• Natural Color	
Forms	• Pellets	
Processing Method	• Injection Molding	

ASTM and ISO Properties ¹

Physical	Nominal Value Unit	Test Method
Specific Gravity	0.920	ASTM D792
Melt Mass-Flow Rate (MFR)		ASTM D1238
(190°C/2.16 kg)	9.0	
(200°C/5.0 kg)	16	
Molding Shrink (Flow)	2.0 to 2.6	ASTM D955
Elastomers	Nominal Value Unit	Test Method
Tensile Stress at 100% (73.4 °F)	180	ASTM D412 ²
Tensile Stress at 300% (73.4 °F)	400	ASTM D412 ²
Tensile Strength at Break (73 °F)	520	ASTM D412 ²
Elongation at Break (73.4 °F)	490	ASTM D412 ²
Tear Strength	100	ASTM D624
Compression Set (22.0 hr)	22	ASTM D395 ³
Hardness	Nominal Value Unit	Test Method
Durometer Hardness (Shore A, 10 sec)	42	ASTM D2240

Processing Information

Injection	Nominal Value Unit
Suggested Max Regrind	20
Rear Temperature	330 to 370
Middle Temperature	360 to 390
Front Temperature	370 to 400
Nozzle Temperature	380 to 420
Processing (Melt) Temp	370 to 410
Mold Temperature	70.0 to 90.0
Injection Pressure	200 to 600
Back Pressure	0.00 to 125
Screw Speed	75 to 125

Copyright ©, 2008 PolyOne Distribution Company The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variation in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the application disclosed. Full-scale testing and end product performance are the responsibility of the user. PolyOne Distribution Company shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond PolyOne Distribution Company's direct control. PolyOne Distribution Company MAKES NO WARRANTIES, EXPRESS OR IMPLIED, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendations, nor as an inducement to practice any patented invention without permission of the patent owner.

Injection Notes

Holding Pressure: 30% of Boost

Injection Velocity: 1 to 5 in/sec

Hold Time (Thick Part): 4 to 10 sec

Hold Time (Thin Part): 1 to 3 sec

Notes

¹ Typical properties: these are not to be construed as specifications.

² Die C

³ Method B
