Versaflex™ LM 3650-65B

Thermoplastic Elastomer

Key Characteristics

Product Description			
Versaflex LM 3650-65B is a commercialized grade. It can overmold to a variety of substrates including PC,ABS, PC/ABS and Copolyester and also has good laser marking performance.			
General			
Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific		
Features	• Chemical Resistant	• Good Processability	
Uses	• Appliances • Consumer Applications • Electrical/Electronic Applications	• Flexible Grips • Overmolding • Soft Touch Applications	• Thin-walled Parts
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Injection Molding		

Technical Properties [1]

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.12	1.12	ASTM D792
Elastomers	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Tensile Stress [2, 3] (300% Strain)	596 psi	4.11 MPa	ASTM D412
Tensile Strength [2, 3] (Break)	1000 psi	6.92 MPa	ASTM D412
Tensile Elongation [2, 3] (Break)	730 %	730 %	ASTM D412
Hardness	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Durometer Hardness (Shore A, 10 sec)	64	64	ASTM D2240
Fill Analysis	**Typical Value (English)**	**Typical Value (SI)**	**Test Method**
Apparent Viscosity (392°F (200°C))	27.2 Pa·s	27.2 Pa·s	ASTM D3835
Additional Information	**Typical Value (English)**	**Typical Value (SI)**	
Generic Material Type	Thermoplastic Elastomer	Thermoplastic Elastomer	

Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	140 to 180 °F	60 to 82 °C
Drying Time	1.0 to 3.0 hr	1.0 to 3.0 hr
Suggested Max Moisture	0.020 to 0.030 %	0.020 to 0.030 %
Suggested Max Regrind	20 %	20 %
Rear Temperature	320 to 360 °F	160 to 182 °C
Middle Temperature	360 to 430 °F	182 to 221 °C
Front Temperature	370 to 440 °F	188 to 227 °C
Nozzle Temperature	380 to 460 °F	193 to 238 °C
Processing (Melt) Temp	380 to 450 °F	193 to 232 °C
Mold Temperature	55 to 110 °F	13 to 43 °C

Copyright ©, 2026 Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as “typical” or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. Avient makes no warranties or guarantees respecting suitability of either Avient’s products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. Avient MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.

Injection	Typical Value (English)	Typical Value (SI)
Back Pressure	0.00 to 50.0 psi	0.00 to 0.345 MPa
Screw Speed	50 to 100 rpm	50 to 100 rpm

Injection Notes

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 of up to 20% can be used with Versaflex LM 3650-65B 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 LM 3650-65B should not be left in the barrel for extended idle periods (greater than 10 minutes under 250?).

Suggested Dewpoint: -40°F

Injection Speed: 0.5 to 4 in/sec
1st Stage - Boost Pressure: 500 to 1,000 psi
2nd Stage - Hold Pressure: 20-60% of Boost
Hold Time (Thick Part): 2 to 4 sec
Hold Time (Thin Part): 1 to 2 sec

Notes

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

[2] Die C

[3] 2 hr

CONTACT INFORMATION

North America

Avon Lake, United States
33587 Walker Road
Avon Lake, OH, United States , 44012
+1 440 930 1000
+1 844 4AVIENT

South America

Sao Paulo, Brazil
Av. Francisco Nakasato, 1700
13295-000 Itupeva
Sao Paulo, Brazil
+55 11 4593 9200

Asia

Shanghai, China
2F, Block C
200 Jinsu Road
Pudong, 201206
Shanghai, China
+86 (0) 21 6028 4888

Europe

Pommerloch, Luxembourg
19 Route de Bastogne
Pommerloch, Luxembourg , L-9638
+352 269 050 35

avient.com

Copyright ©, 2026 Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the Information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as “typical” or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the Information. Avient makes no warranties or guarantees respecting suitability of either Avient’s products or the Information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the Information and/or use or handling of any product. Avient MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the Information or products reflected by the Information. This data sheet shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.