

# Versaflex™ VDT 4202-40B

## Thermoplastic Elastomer

### Key Characteristics

Product Description			
Versaflex™ VDT 4202-40B is a vibration damping thermoplastic elastomer for polypropylene overmolding, featuring improved compression set			
General			
Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Latin America • North America	
Features	• Vibration Damping		
Uses	• Appliance Components • Automotive Applications • Business Equipment	• Consumer Applications • Electrical/Electronic Applications • Flexible Grips	• Power/Other Tools • Soft Touch Applications • Sporting Goods
RoHS Compliance	• RoHS Compliant		
Appearance	• Black		
Forms	• Pellets		
Processing Method	• Extrusion	• Injection Molding	

### Technical Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.00	1.00	ASTM D792
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Strength <sup>2, 3</sup> (Break, 73°F (23°C))	701 psi	4.83 MPa	ASTM D412
Tensile Elongation <sup>2, 3</sup> (Break, 73°F (23°C))	560 %	560 %	ASTM D412
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	41	41	ASTM D2240
Fill Analysis	Typical Value (English)	Typical Value (SI)	Test Method
Apparent Viscosity 392°F (200°C), 11200 sec <sup>-1</sup>	10.0 Pa·s	10.0 Pa·s	ASTM D3835

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Rear Temperature	330 to 350 °F	166 to 177 °C
Middle Temperature	350 to 370 °F	177 to 188 °C
Front Temperature	370 to 440 °F	188 to 227 °C
Nozzle Temperature	370 to 440 °F	188 to 227 °C
Mold Temperature	60 to 100 °F	16 to 38 °C
Back Pressure	0.00 to 100 psi	0.00 to 0.689 MPa
Screw Speed	25 to 100 rpm	25 to 100 rpm

Copyright © 2020 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 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 up to 20% can be used with Versaflex™ VDT 4202-40B 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™ VDT 4202-40B has excellent 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 8 - 10 minutes or longer.

Drying is not Required.

Injection speed range: 1-5 in/sec  
 2nd Stage hold: 20-40% of boost  
 Hold time (thick) range: 4-10 sec  
 Hold time (thin) range: 1-4 sec

**Notes**

<sup>1</sup> Typical values are not to be construed as specifications.

<sup>2</sup> Die C

<sup>3</sup> 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 ©, 2020 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.