# Versaflex™ VDT 4132

## Thermoplastic Elastomer

### Key Characteristics

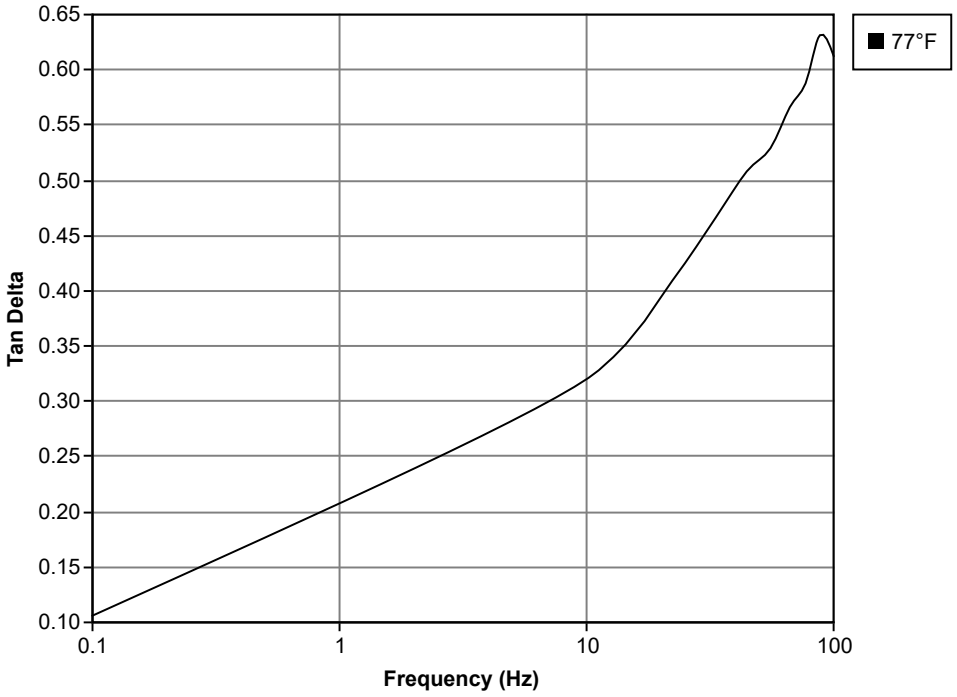
| Product Description | | | |
|---|---|---|---|
| Versaflex™ VDT 4132 is designed to create vibration damping.<br>• Excellent Vibration Damping | | | |
| **General** | | | |
| Material Status | • Commercial: Active | | |
| Regional Availability | • Africa & Middle East<br>• Asia Pacific | • Latin America<br>• North America | |
| Features | • Vibration Damping | | |
| Uses | • Appliance Components<br>• Automotive Applications<br>• Business Equipment | • Consumer Applications<br>• Electrical/Electronic Applications<br>• Flexible Grips | • Power/Other Tools<br>• Soft Touch Applications<br>• Sporting Goods |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Natural Color | | |
| Forms | • Pellets | | |
| Processing Method | • Extrusion | • Injection Molding | |
| Multi-Point Data | • Vibration Damping TPE Frequency Sweep | • Vibration Damping TPE Temperature Sweep | |

### Technical Properties [1]

| Physical | Typical Value (English) | Typical Value (SI) | Test Method |
|---|---|---|---|
| Density / Specific Gravity | 0.900 | 0.900 | ASTM D792 |
| Molding Shrinkage - Flow | 0.017 to 0.023 in/in | 1.7 to 2.3 % | ASTM D955 |
| **Elastomers** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Tensile Stress [2, 3] (100% Strain, 73°F (23°C)) | 75.0 psi | 0.517 MPa | ASTM D412 |
| Tensile Stress [2, 3] (300% Strain, 73°F (23°C)) | 138 psi | 0.951 MPa | ASTM D412 |
| Tensile Strength [2, 3] (Yield, 73°F (23°C)) | 894 psi | 6.16 MPa | ASTM D412 |
| Tensile Elongation [2, 3] (Break, 73°F (23°C)) | 920 % | 920 % | ASTM D412 |
| Tear Strength | 80.0 lbf/in | 14.0 kN/m | ASTM D624 |
| Compression Set (73°F (23°C), 22 hr) | 12 % | 12 % | ASTM D395B |
| **Hardness** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Durometer Hardness (Shore A, 10 sec) | 31 | 31 | ASTM D2240 |
| **Fill Analysis** | **Typical Value (English)** | **Typical Value (SI)** | **Test Method** |
| Apparent Viscosity | | | ASTM D3835 |
| 392°F (200°C), 1340 sec^-1 | 104 Pa·s | 104 Pa·s | |
| 392°F (200°C), 11200 sec^-1 | 19.5 Pa·s | 19.5 Pa·s | |

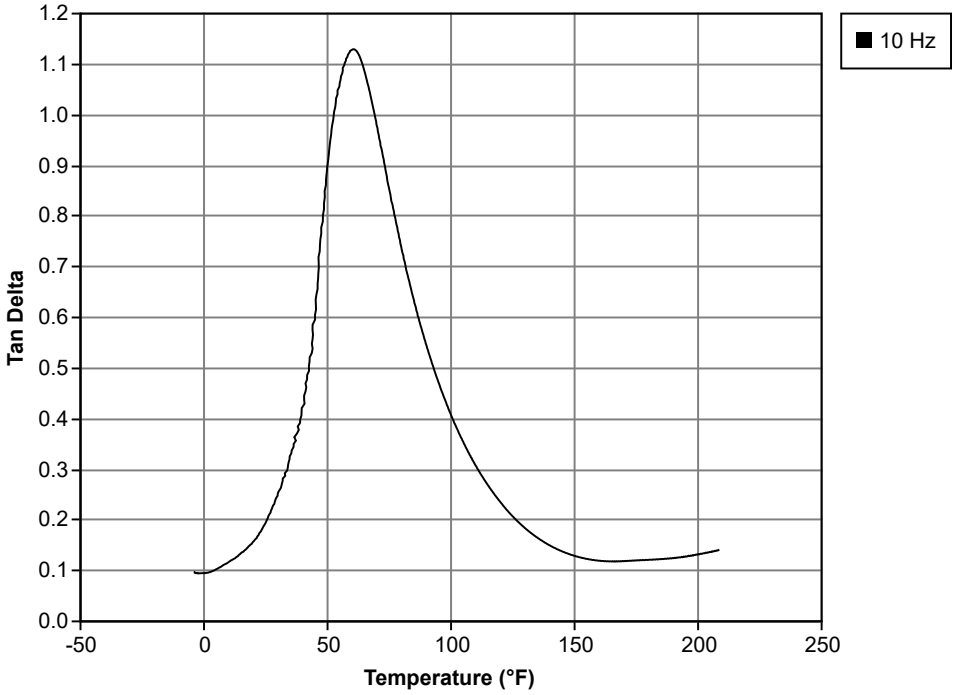
Copyright ©, 2026 Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the Information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the 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.

## Vibration Damping TPE Frequency Sweep




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.

Vibration Damping TPE Temperature Sweep




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.

## Processing Information

| Injection | Typical Value (English) | Typical Value (SI) |
|---|---|---|
| Rear Temperature | 330 to 360 °F | 166 to 182 °C |
| Middle Temperature | 360 to 400 °F | 182 to 204 °C |
| Front Temperature | 370 to 410 °F | 188 to 210 °C |
| Nozzle Temperature | 370 to 410 °F | 188 to 210 °C |
| Processing (Melt) Temp | 380 to 430 °F | 193 to 221 °C |
| Mold Temperature | 60 to 80 °F | 16 to 27 °C |
| Injection Pressure | 100 to 800 psi | 0.689 to 5.52 MPa |
| Back Pressure | 0.00 to 80.0 psi | 0.00 to 0.552 MPa |
| Screw Speed | 80 to 120 rpm | 80 to 120 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 up to 20% can be used with Versaflex™ VDT 4132 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 4132 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

| Extrusion | Typical Value (English) | Typical Value (SI) |
|---|---|---|
| Melt Temperature | 365 to 390 °F | 185 to 199 °C |
| Die Temperature | 365 to 380 °F | 185 to 193 °C |

**Extrusion Notes**

Rear = 350-370F
Middle = 375-400F
Front = 375-400F
Nozzle = 365-380F
Screw speed = 100-500rpm

### Notes

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

[2] Die C

[3] 2 hr

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.

## 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.