

# Versaflex™ CE 3130-70N

## Thermoplastic Elastomer

### Key Characteristics

#### Product Description

Versaflex™ CE 3130-70N is targeted for consumer electronics applications where excellent surface appearance with long-term life, excellent abrasion resistance, performed UV and stain resistance, chemical resistance and silky feel are required. Versaflex™ CE 3130-70N can also overmold to a variety of substrates including PC, ABS, PC/ABS, and Copolyester.

#### General

Material Status	• Commercial: Active		
Regional Availability	• Asia Pacific	• Europe	• North America
Features	• Good Colorability • Good Processability	• Low Friction • Pleasing Surface Appearance	
Uses	• Consumer Applications	• Electrical/Electronic Applications	• Overmolding
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

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

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.04	1.04	ASTM D792
Molding Shrinkage - Flow	2.0E-3 to 8.0E-3 in/in	0.20 to 0.80 %	ASTM D955
Elastomers	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Stress (300% Strain)	856 psi	5.90 MPa	ASTM D412
Tensile Strength <sup>2, 3</sup> (Break, 73°F (23°C))	2220 psi	15.3 MPa	ASTM D412
Tensile Elongation <sup>2, 3</sup> (Break, 73°F (23°C))	660 %	660 %	ASTM D412
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Durometer Hardness (Shore A, 10 sec)	70	70	ASTM D2240
Fill Analysis	Typical Value (English)	Typical Value (SI)	Test Method
Apparent Viscosity 392°F (200°C), 11200 sec <sup>-1</sup>	22.2 Pa·s	22.2 Pa·s	ASTM D3835

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	158 to 176 °F	70 to 80 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Suggested Max Moisture	0.020 to 0.030 %	0.020 to 0.030 %
Suggested Max Regrind	20 %	20 %
Rear Temperature	340 to 360 °F	171 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
Back Pressure	0.00 to 50.0 psi	0.00 to 0.345 MPa

Copyright © 2023 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)
Screw Speed	50 to 100 rpm	50 to 100 rpm

**Injection Notes**

Color concentrates with EVA or TPU carriers are most suitable for coloring Versaflex CE 3130-70N. 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.

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 CE 3130-70N 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 CE 3130-70N should not be left in the barrel for extended idle periods (greater than 5 minutes).

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**

<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 © 2023 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.