



# VERSIFY™ 2200 Plastomer

## Overview

VERSIFY™ 2200 Plastomer is a resin with a low melt flow rate making it suitable for blown film, blow molding, extrusion and thermoforming. It is an excellent sealant and is particularly suitable for use in BOPE structures. It has excellent compatibility with PP and is an useful agent to bring softness and temperature performance.

### Main Characteristics

- Pellet
- Low Melt Flow Rate
- Good sealant
- Compatible with PP
- Soft polypropylene

### Applications

- Blown Film
- Sealant
- Soft films
- BOPE
- Extrusion Applications

### Complies with:

- EU, No 10/2011
- U.S. FDA FCN 909
- U.S. FDA 21 CFR 175.105(c)(5)
- Consult the regulations for complete details.

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.876 g/cm <sup>3</sup>	0.876 g/cm <sup>3</sup>	ASTM D792
Melt Mass-Flow Rate (230°C/2.16 kg)	2.0 g/10 min	2.0 g/10 min	ASTM D1238
Total Crystallinity	21 %	21 %	Dow Method
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength (Break, Compression Molded)	2970 psi	20.5 MPa	ASTM D638
Tensile Elongation <sup>1</sup>			ASTM D638
Break, Compression Molded	690 %	690 %	
Flexural Modulus - 1% Secant (Compression Molded)	14500 psi	99.9 MPa	ASTM D790
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	2.0 mil	51 µm	
Secant Modulus			ASTM D882
2% Secant, MD : 2.0 mil (51 µm)	12600 psi	86.5 MPa	
2% Secant, TD : 2.0 mil (51 µm)	13700 psi	94.4 MPa	
Tensile Strength			ASTM D882
MD : Yield, 2.0 mil (51 µm)	1550 psi	10.7 MPa	
TD : Yield, 2.0 mil (51 µm)	1460 psi	10.1 MPa	
MD : Break, 2.0 mil (51 µm)	4280 psi	29.5 MPa	
TD : Break, 2.0 mil (51 µm)	3810 psi	26.3 MPa	
Elmendorf Tear Strength <sup>2</sup>			ASTM D1922
MD : 2.0 mil (51 µm)	590 g	590 g	
TD : 2.0 mil (51 µm)	1300 g	1300 g	
Seal Initiation Temperature <sup>3</sup>			Dow Method
2.0 mil (51 µm)	140 °F	60.0 °C	
Ultimate Seal Strength Temperature			Dow Method
2.0 mil (50.8 µm)	176 °F	80 °C	



<b>Hardness</b>	<b>Nominal Value (English)</b>	<b>Nominal Value (SI)</b>	<b>Test Method</b>
Durometer Hardness <sup>4</sup>			ASTM D2240
Shore A, Compression Molded	94	94	
Shore D, Compression Molded	42	42	
<b>Thermal</b>	<b>Nominal Value (English)</b>	<b>Nominal Value (SI)</b>	<b>Test Method</b>
Glass Transition Temperature	-11.2 °F	-24.0 °C	Dow Method
Vicat Softening Temperature	145 °F	63.0 °C	ASTM D1525
Melting Temperature (DSC)	180 °F	82.2 °C	Dow Method
<b>Optical</b>	<b>Nominal Value (English)</b>	<b>Nominal Value (SI)</b>	<b>Test Method</b>
Gardner Gloss			ASTM D523
20°, 39.4 mil (1000 µm), Compression Molded	110	110	
60°, 39.4 mil (1000 µm), Compression Molded	128	128	
Haze (1550 mil (39400 µm), Injection Molded)	4.8 %	4.8 %	ASTM D1003

### Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

<sup>1</sup> 2.0 in/min (50 mm/min)

<sup>2</sup> Method B

<sup>3</sup> Temperatures at which 1 lb/in. (4.4 N/25.4 mm) heat seal strength is achieved.

<sup>4</sup> Hardness after 10 seconds.

