Technical Information

VERSIFY™ 4301
Elastomer

Overview

VERSIFY 4301 Elastomer is a high melt flow rate resin suitable for a wide variety of applications and fabrication processes, including extrusion and injection molding. It is an excellent resin for films and soft compounds and is an excellent choice for PP modification.

Main Characteristics:

- High flow
- Superior Elasticity
- Excellent compatibility with PP
- Free flowing

Applications:

- Soft compounds
- PP modification
- Blend component for thermoplastic elastomers

Complies with:

- U.S. FDA FCN 708
- U.S. FDA 21 CFR 175.105(c) (5)
- EU, No 10/2011

Consult regulations for complete details

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	0.868	g/cm³	0.868	g/cm³	ASTM D792
Melt Mass-Flow Rate (230°C/2.16 kg)	25	g/10 min	25	g/10 min	ASTM D1238
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus - 100% Secant [1, 2] (Injection Molded)	595	psi	4.10	MPa	ASTM D638
Tensile Strength [2]					ASTM D638
Yield, Injection Molded	609	psi	4.20	MPa	
Break, Injection Molded [1]	440	psi	3.03	MPa	
Tensile Elongation [2] (Yield, Injection Molded)	39	%	39	%	ASTM D638
Flexural Modulus - 1% Secant [2] (Injection Molded)	5220	psi	36.0	MPa	ASTM D790
Hardness	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Durometer Hardness [3]					ASTM D2240
Shore A, Injection Molded	84		84		
Shore D, Injection Molded	29		29		
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Glass Transition Temperature	-16.6	°F	-27.0	°C	DSC
Vicat Softening Temperature	124	°F	51.0	°C	ASTM D1525
Optical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Gloss					ASTM D2457
45°, 78.7 mil (2000 µm), Injection Molded	73		73		
Haze (78.7 mil (2000 µm), Injection Molded)	2.20	%	2.20	%	ASTM D1003
Additional Information	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Total Crystallinity	• 16 • 16	%	• 16 • 16	%	Dow Method

Notes

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

[1] 2.0 in/min (50 mm/min)

[2] Aged two weeks (±3 days) prior to testing.

[3] Aged two weeks (±3 days) prior to testing