



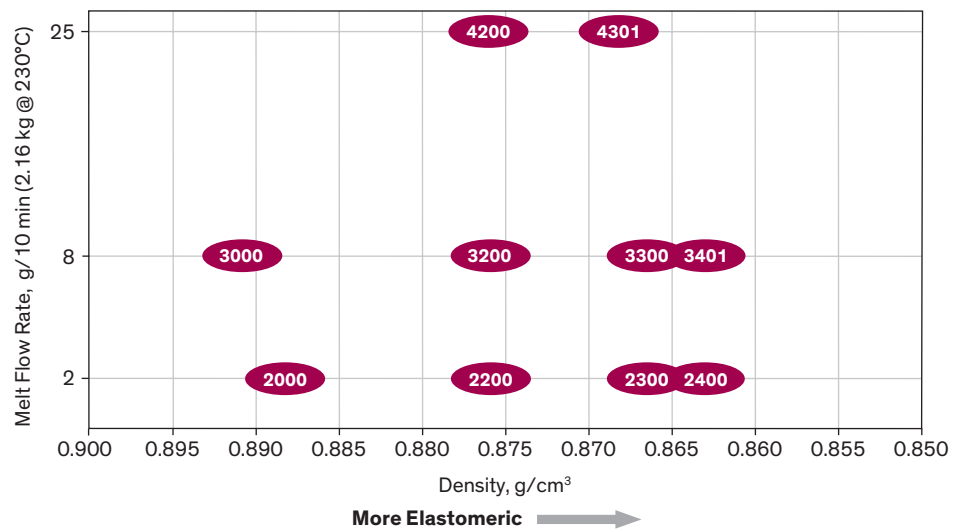
VERSIFY™ Plastomers and Elastomers

Product Selection Guide

VERSIFY™ Plastomers and Elastomers are a versatile family of specialty propylene-ethylene copolymers produced using a revolutionary catalyst in conjunction with Dow's proprietary INSITE™ Technology. The distinct molecular architecture of these polymers offers a combination of excellent optics, sealing, and hot tack performance, plus elasticity, flexibility, softness, and compatibility in blends for film, fiber, injection molding, extrusion coating, soft compound, and sealant applications.



Figure 1: VERSIFY™ Plastomer and Elastomer Products⁽¹⁾



All grades are commercialized VERSIFY™ Plastomer and Elastomer products.

⁽¹⁾ Typical properties; not to be construed as specifications. Users should confirm results by their own tests.

Table 1: Typical Properties of VERSIFY™ Plastomers and Elastomers⁽¹⁾

Property	Test Method	2000	2200	2300	2400
Processing Type		Blown Film	Blown Film	Blown Film, Extrusion, Calendering	Blown Film, Extrusion, Calendering
Typical Application(s)		Food and Specialty Films	Food and Specialty Films	Thermoplastic Elastomers (TPEs), Industrial Films, Filled Compounds	TPEs, Filled Compounds
Density, g/cm ³	ASTM D792	0.888	0.876	0.867	0.863
Melt Flow Rate, g/10 min (2.16 kg @ 230°C)	ASTM D1238	2	2	2	2
Crystallinity, %	Dow Method ⁽²⁾	35	21	13	12
Durometer Hardness (Shore A) ⁽³⁾	ASTM D2240	96	92	88	79
Durometer Hardness (Shore D) ⁽³⁾	ASTM D2240	54	39	32	26
Flexural Modulus, MPa ⁽³⁾	ASTM D790	359	100	42	26
Tensile Strength @ Break, MPa ⁽³⁾	ASTM D638	26	21	19	6
Tensile Elongation @ Break, % ⁽³⁾	ASTM D638	680	690	730	11
Haze 2 mm, % ⁽⁴⁾	ASTM D1003	18	14	6	5
Glass Transition Temperature (T _g), °C	Dow Method ⁽²⁾	-17	-23	-27	-30
Vicat Softening Point, °C	ASTM D1525	94	66	43	42

⁽¹⁾ Typical properties only; not to be construed as specifications. Users should confirm results by their own tests.

⁽²⁾ Additional information available upon request

⁽³⁾ Compression molded samples

⁽⁴⁾ Injection molded samples



PACKAGING FILMS

ROOFING MEMBRANES

THIN WALL CONTAINERS

3000	3200	3300	3401	4200	4301
Cast Film	Cast Film	Cast Film	Injection Molding, Cast Film	Extrusion Coating, Injection Molding	Injection Molding
General Purpose, Biaxially Oriented Polypropylene (BOPP) Sealant	General Purpose, BOPP Sealant	General Purpose, Elastic Films	Impact Modification, TPEs / Thermoplastic Olefins (TPOs), Industrial Film, Stretch Cling Film	General Purpose, Fibers	Impact Modification, Masterbatches
0.891	0.876	0.867	0.863	0.876	0.868
8	8	8	8	25	25
44	30	11	14	29	16
96	94	85	72	94	84
60	44	31	22	42	29
389	131	39	23	112	36
27	22	20	7	23	3
730	840	750	600	850	39
9	4	4	3	5	2
-14	-23	-27	-30	-23	-27
105	59	42	<20	61	51

Table 2: Value Propositions by Market Segment

Packaging/Films	Roofing Membranes	Impact Modification	Nonwoven/Elastic Films
Key Value Propositions			
<ul style="list-style-type: none"> • PP-PE Adhesion • Seal strength • Broad seal window • Processability • Easy opening • Clarity • Unique haptics • Toughness 	<ul style="list-style-type: none"> • Heat weldability • Consistent welding • Flexibility • Reliability • Heat resistance • Low temperature properties 	<ul style="list-style-type: none"> • Clarity • Impact resistance • At press blending • Low glass transition • Efficiency 	<ul style="list-style-type: none"> • Unique haptics: dry with soft-touch feel • Elastic recovery • Processability • Resiliency • Compatibility with PP
Product Examples			
VERSIFY™ 2000 VERSIFY™ 2200 VERSIFY™ 2400 VERSIFY™ 3000 VERSIFY™ 3200 VERSIFY™ 3300 VERSIFY™ 3401	VERSIFY™ 2300	VERSIFY™ 3401 VERSIFY™ 4301 VERSIFY™ 2400	VERSIFY™ 4200 VERSIFY™ 2400

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