

# ASAFLEX™ Grades and Properties

Property	Test method	Units	805	810	825	830	840
					815 (with wax)	835 (with wax)	845 (with wax)
Density	ISO 1183	kg/m <sup>3</sup>	1.02x10 <sup>3</sup>	1.01x10 <sup>3</sup>	1.02x10 <sup>3</sup>	1.01x10 <sup>3</sup>	1.02x10 <sup>3</sup>
Water absorption	ISO 62	%	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
MFR (200°C, 5kgf)	ISO 1133	g/10 min	10	5	6	5	7
Mold shrinkage	—	%	0.2~0.8	0.2~0.8	0.2~0.8	0.2~0.8	0.2~0.8
Tensile strength* <sup>1</sup>	ISO 527-1	MPa	30	20	27	18	27
Elongation* <sup>1</sup>		%	15	250	200	250	40
Flexural strength	ISO 178	MPa	50	24	37	21	34
Flexural modulus		MPa	1550	1400	1200	1100	1500
Rockwell hardness	ISO 2039-2	R scale	88	< 10	55	< 10	< 10
Durometer hardness	ISO 868	D scale	75	62	71	55	68
Charpy impact strength unnotched* <sup>2</sup>	ISO 179	kJ/m <sup>2</sup>	16	NB	100	NB	NB
Charpy impact strength V-notched* <sup>2</sup>		kJ/m <sup>2</sup>	1.3	P	2	P	2
Heat distortion temp.* <sup>3</sup>	ISO 75-1	°C	63	65	57	60	62
Vicat softening point* <sup>4</sup>	ISO 306	°C	91	83	82	72	81
Total light transmission* <sup>5</sup>	ISO 13468	%	90	89	90	89	88
Haze* <sup>5</sup>	ISO 14782	%	0.5	1.2	0.5	2	1.2
Key advantages			-Transparency -Stiffness -Surface hardness	-Compatibility with styrenics -Impact strength -Hinge capability	-Transparency -Low anisotropy -Impact strength -Thermal stability	-Impact strength -Excellent properties balance	-Compatibility with GPPS -Excellent properties balance
Recommended molding process	Injection molding		⊙	—	⊙	○	○
	Extrusion		—	⊙	⊙	⊙	⊙
	Blow molding		—	—	⊙	—	—
Typical applications			-Cosmetics caps -Food containers	-Cosmetics caps -Food containers	-Blister packaging -laminates/ shrink labels	-Blister packaging -Shrink labels	-Laminate/ shrink labels -Drink cups -Food containers -Gardening ampoules

\*<sup>1</sup> At 5 mm/min for ASAFLEX™ 805 and 50 mm/min for all other grades. \*<sup>2</sup>Value at fracture into two or more pieces  
NB: non-break at 15 J, P: partial break at 15 J. \*<sup>3</sup>Non-annealed, 1.8 MPa load, 3 mm width. \*<sup>4</sup>10 N load, 50 K/h.  
\*<sup>5</sup>2 mm plate.

Please note that all data and values are given as typical results obtained with the indicated test methods for purposes of basic reference in grade selection only, and not as any product specification or warranty of any nature, and are subject to change without notice.