

## **DOW INFUSE™ OLEFIN BLOCK COPOLYMERS**



**DOW INFUSE<sup>™</sup> Olefin Block Copolymers** are polyolefin elastomers with alternating blocks of hard (highly rigid) and soft (highly elastomeric) segments. The block structure of INFUSE<sup>™</sup> offers a good performance balance of flexibility and high heat resistance. INFUSE<sup>™</sup> also offers improved processing speeds over other random polyolefin copolymers. INFUSE<sup>™</sup> can be used to produce flexible molded and extruded products or it can be used as an impact modifier in polyolefins or as a compatibilizer for PP / PE blends.

PROPERTY	ASTM Method	9000	9010	9007	9077	9100	9107	9500	9507	9530	9807	9817	9900
Melt Index, g/10 min. 190°C/2.16kg	D1238	0.5	0.5	0.5	0.5	1	1	5	5	5	15	15	30
Density, g/cc	D792	0.877	0.877	0.866	0.869	0.877	0.866	0.877	0.866	0.887	0.866	0.877	0.880
DSC Melting Point, °C	Dow Method	120	122	119	118	120	121	122	119	119	118	120	122
Glass Transition Temp, °C	Dow Method	-62	-54	-62	-65	-62	-62	-62	-62	-62	-62	-62	-50
Hardness, Shore A	D2240	71	77	64	51	75	60	69	60	83	55	71	78
Tensile Modulus, 100% Secant, MPa	D638	3.3	3.4	1.8	1.2	2.8	1.6	2.3	1.5	3.8	1.3	2.3	4.0
Ultimate Tensile Strength, MPa	D638	6.3	13.2	4.1	3.0	6.6	5.1	5.0	2.9	7.4	1.2	2.4	4.4
Ultimate Tensile Elongation, %	D638	370	>750	400	>750	480	600	1150	1210	1000	1200	1540	780
Ultimate Tensile Strength, MPa	D412	15.0	14.5	10.0		13.0	11.0	10.0	7.0	17.0	3.0	7.0	5.1
Ultimate Tensile Elongation, %	D412	1150	770	1300		1250	1550	1600	1900	1300	2200	1700	870
Tear Strength, kN/m	D624	42	48	29	26	40	27	35	22	52	17	31	47.5
TMA @ 1.0mm, °C	1N, 5°C/min	104	121	88	108	114	66	97	77	111	60	95	68
Compression Set @ 21°C, %	D395	23	24	18	20	19	16	22	22	20	16	15	38
Compression Set @ 70°C, %	D395	45	67	57	43	47	49	55	70	45	76	58	98

## **Common Applications**









Health & Hygiene Elastic Films

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