



## NexPrene TPVs

### DESCRIPTION:

NexPrene® thermoplastic vulcanizates (TPVs) are fully cross-linked EPDM/PP compounds designed to replace thermoset elastomers, such as polychloroprene (neoprene) or EPDM, and conventional thermoplastic rubber. NexPrene materials provide the advantage of low-cost thermoplastic processing combined with the performance of vulcanized thermoset rubber.

### APPLICATIONS:

NexPrene compounds are suitable for numerous components in several markets, including the automotive, appliance, business machines, construction, consumer products, electrical and electronics, food contact, fluid delivery, hardware, and medical devices segments.

Property	ASTM	Units	1040A	1045A	1050A	1055A	1060A	1064A	1067A	1070A	1075A	1080A	1084A	1087A	1040D	1050D
Hardness	D-2240															
Extrusion	5 sec	Shore A/D	36A	41A	46A	51A	56A	59A	63A	66A	71A	77A	80A	84A	38D	47D
Injection Molded	5 sec	Shore A/D	40A	45A	50A	55A	60A	64A	67A	70A	75A	81A	84A	87A	41D	50D
Specific Gravity	D-792		0.93	0.94	0.97	0.97	0.97	0.97	0.96	0.97	0.97	0.97	0.96	0.96	0.94	0.93
Tensile Strength	D-412	MPa	5	5.2	6.3	6.5	7	7.6	8	8.7	10	12.4	14.5	16.8	20.1	29.2
Tensile Modulus @100%	D-412	MPa	0.9	0.96	1.6	2.2	2.4	2.7	2.8	3.1	3.6	4.7	5.5	6.1	8.9	9.4
Ultimate Elongation	D-412	%	500	510	400	427	500	540	510	611	631	649	525	550	570	600
Tear Strength Die C	D-624	kN/m	11.5	13	17	31	32	34	35	41	47	57	59	60	74.5	97.1
IRM 903 Oil Swell 70 hr@125°C	D-471	%	130	125	120	110	110	110		100	90	85	82	80	65	37
Compression Set	D-395															
22 hr @ 70°C		%	26	26	27	27	28	29	30	32	35	41	43	45	60	69
168 hr @ 100°C		%				28	30	35		37	39	42	45	47	61	80
70 hr @ 125°C		%				40	43	45	40	47	50	60	70	75	83	85
Brittle Point	D-746	°C	-60	-60	-60	-60	-60	-60		-60	-60	-60	-60	-60	-57	-30
Ozone Resistance	D-1149															
500 hr @ 100 pphm ozone concentration			Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good	Good

11-11-02

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