

Combining the Advantages of Thermoplastic Processing and Elastomeric Performance

Sarlink 5700 series grades exemplify both our curiosity and discipline in research, and care and dedication in production. Our engineers have succeeded in creating a product range that feels like rubber yet processes easily like plastic. Sarlink 5700 is based on dynamically vulcanized rubber in a polypropylene matrix, which combines superb elastic properties with the processing ease of thermoplastics.

High Material Efficiency

Sarlink is the environmentally friendly equivalent to general purpose thermoset rubber compounds, with high chemical resistance comparable to general purpose polychloroprene rubber compounds. This is unique combination enables a broad range of applications.

Compared to thermoset rubber, using Sarlink will reduce production costs due to its shorter cycle times, reduced energy needs, and a very high material efficiency as a result of its recyclability.

Main Characteristics

Sarlink 5700 series compounds are characterized by their fully optimized and superb UV resistance and improved fogging properties, combined with excellent elastic and sealing performance. Their well balanced rheological properties allow for a broad operating window and their good morphology

control will reduce surface imperfections and defects. The lot-to-lot and intra-lot variations are well controlled to very low levels.

These qualities make Sarlink 5700 series materials extremely suitable for extruded automotive sealing systems.

The Sarlink 5700 series is available in hardnesses from 25 Shore A up to 50 Shore D, in black color.

Safety

Sarlink does not present a toxic hazard through skin contact or inhalation when handled under normal conditions. Contact with molten polymers or inhalation of fumes should be avoided during processing. More and detailed information can be downloaded from www.sarlink.com.

Other Sarlink Products

Other Sarlink grade series exist, each with a specialty set of properties designed to fit a variety of application requirements. In addition to standard Sarlink series, special Sarlink grades exist or can be developed to meet unique customer requirements, such as specific OEM or regulatory approval requirements, or potable water contact. Information regarding these specialty grades and other Sarlink series are available via your Sarlink representative or on www.sarlink.com.



Data Sarlink 5700 extrusion grades (ISO standards - typical properties)

Date of last modification: 1-Aug-08

Typical properties	Test standard	Units S.I.	5725B4	5735B4	5745B4	5755B4	5765B4	5775B4	5780B4	5790B4	5740DB4	5750DB4
Density	ISO 1183	kg/m ³	930	930	950	970	970	970	970	970	960	960
Hardness (5 sec delay)	ISO 868	Shore A or D										
Extruded sample			23A	34A	44A	55A	65A	72A	80A	87A	38D	49D
Injection molded sample			26A	36A	46A	58A	68A	75A	82A	89A	40D	52D
Tensile properties	ISO 37											
<i>Flow direction</i>												
Tensile strength at break		MPa	1,5	2,6	3,0	4,6	6,3	7,3	9,0	13,4	18,0	21,5
Modulus at 100% elongation		MPa	1,1	1,7	2,1	3,1	4,2	4,9	6,8	9,8	13,3	18,0
Elongation at break		%	200	210	230	280	320	340	360	370	490	490
<i>Cross flow direction</i>												
Tensile strength at break		MPa	2,5	3,3	4,3	5,2	7,1	8,5	10,0	14,1	19,0	23,0
Modulus at 100% elongation		MPa	0,5	0,8	1,2	1,9	2,7	3,2	4,5	6,5	9,0	13,1
Elongation at break		%	510	530	540	550	570	590	590	600	640	640
Tear strength (cross flow)	ISO 34B											
Unnicked angle		kN/m	9	10	17	21	29	35	47	70	88	141
Compression set	ISO 815											
22 hrs@23°C		%	10	12	13	17	21	23	28	36	46	55
22 hrs@70°C		%	20	23	26	27	30	32	41	49	58	67
70 hrs@125°C		%	51	42	42	42	44	47	60	72	80	85
Hot air aging (cross flow direction)	ISO 188											
168 hrs@150°C												
Change in hardness		pts	-3	1	-2	-2	1	2	-1	1	3	3
Retention tensile strength at break		%	96	102	102	88	87	90	88	87	78	84
Retention modulus at 100% elongation		%	93	108	101	98	96	102	107	110	105	115
Retention elongation at break		%	82	112	112	98	95	89	80	80	75	75
1000 hrs@135°C												
Change in hardness		pts	-1	0	-2	1	2	3	1	1	3	4
Retention tensile strength at break		%	96	95	93	94	93	92	90	93	80	80
Retention modulus at 100% elongation		%	93	104	100	103	105	104	110	114	109	124
Retention elongation at break		%	76	115	114	110	98	93	81	80	75	70
Volume swell	ISO 1817											
70 hrs@125°C in IRM 903 oil		%	71	110	120	99	91	88	73	60	47	38
Apparent shear viscosity	ISO 11443											
@206 1/s, 200°C	Capillary	Pa.s	140	210	280	315	340	330	330	350	400	430

Some grades may not be available locally


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About Sarlink

Sarlink is a global brand of premium quality pelletized thermoplastic vulcanizates (TPVs). A specialist in developing and manufacturing high quality TPVs to offer customers the material properties they need, such as flexibility, durability and low compression set. The products are produced under the highest production standards. Sold and distributed by a dedicated and service-driven sales force. And supported by an expert application development. Sarlink adds value by being a specialist in high quality TPV solutions and offering a support structure based on close partnership. Sarlink is a truly global company with production operations and laboratories in Leominster MA (USA) and Genk (Belgium), and sales/marketing and technical support

offices in Southfield MI (USA), Leominster MA (USA), Sittard (The Netherlands), Shanghai (China) and Singapore.

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