

Combining the Advantages of Thermoplastic Processing and Elastomeric Performance

Sarlink 4700 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 4700 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 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 4700 series compounds are characterized by high or super high flow properties coupled with excellent elastic behavior and UV resistance. These grades

are specifically designed for use in injection molded parts requiring outstanding surface appearance, especially for use in hard-to-fill parts. Products using these grades can be manufactured with fast cycle time and easy mold release. The Sarlink 4700 series is available in hardnesses from 50 Shore A up to 85 Shore A, 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 4700 high flow injection molding grades (ISO standards - typical properties)

Date of last modification: 1-Aug-08

Typical properties	Test standard	Units S.I.	4750B42	4755B42	4765B40	4765B42	4775B40	4775B42	4785B40
Density	ISO 1183	kg/m ³	910	910	910	910	910	910	910
Hardness (5 sec delay)	ISO 868	Shore A or D							
Extruded sample			50A	54A	62A	62A	74A	74A	84A
Injection molded sample			53A	56A	65A	65A	76A	76A	86A
Tensile properties	ISO 37								
<i>Flow direction</i>									
Tensile strength at break		MPa	3,9	4,3	5,0	4,9	6,0	5,8	8,9
Modulus at 100% elongation		MPa	2,2	2,7	3,0	2,9	3,5	3,4	5,5
Elongation at break		%	320	390	360	340	410	410	450
<i>Cross flow direction</i>									
Tensile strength at break		MPa	4,2	5,0	5,6	5,1	6,6	6,3	9,5
Modulus at 100% elongation		MPa	1,5	1,8	2,4	2,3	3,1	3,2	4,8
Elongation at break		%	440	500	490	400	490	470	540
Tear strength (cross flow)	ISO 34B								
Unnicked angle		kN/m	16	19	26	25	33	31	40
Compression set	ISO 815								
22 hrs@23°C		%	15	19	20	23	24	24	32
22 hrs@70°C		%	26	28	26	32	36	39	44
70 hrs@125°C		%	40	43	45	48	52	56	72
Hot air aging (cross flow direction)	ISO 188								
<i>168 hrs@150°C</i>									
Change in hardness		pts	-1	-2	0	1	1	1	3
Retention tensile strength at break		%	80	94	82	80	78	81	90
Retention modulus at 100% elongation		%	93	99	98	100	102	102	107
Retention elongation at break		%	87	98	83	76	71	76	82
<i>1000 hrs@135°C</i>									
Change in hardness		pts	2	2	2	1	3	-2	1
Retention tensile strength at break		%	89	98	88	82	88	82	96
Retention modulus at 100% elongation		%	99	107	102	101	105	103	109
Retention elongation at break		%	99	96	87	78	84	72	86
Volume swell	ISO 1817								
70 hrs@125°C in IRM 903 oil		%	85	90	84	84	74	73	65
Apparent shear viscosity	ISO 11443								
@206 1/s, 200°C	Capillary	Pa.s	220	220	230	210	220	200	190

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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