Sarlink 4700 Series

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

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

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/m3	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								
Flow direction									
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
Cross flow direction									
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								
168 hrs@150°C									
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
1000 hrs@135°C									
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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Stretching innovations