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Sarlink 3400 Series

Thermoplastic Elastomers for (drinking) water applications

Sarlink 3400 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 3400 is based on dynamically vulcanized rubber in a polypropylene matrix, which combines superb elastic properties with the processing ease of thermoplastics.

A wide variety of water applications

Sarlink 3400 series is your best choice for beverage, cold and hot water applications when you need a soft touch grip or an elastic seal with an excellent long term performance. The products in this range offer special design opportunities to produce integrated parts and/ or reduce solution costs.

We have developed the 3400 product line for beverage and (drinking) water applications such as liners can covers, water stops, home plumbing, laundry gaskets, tubing for food appliances and hoses for industrial water (or other liquids).

We are the experts in high quality TPV production and practical application support. You are the expert on your applications. Together we can develop an endless range of possibilities, many yet to be explored. Whatever your intended purpose is, using Sarlink in the manufacturing process will optimize the quality of your performance. We have a long experience in product safety aspects of these applications and will be happy to help you with our knowledge.

Main Characteristics

The compounds of the Sarlink 3400 series combine flexibility and elastic properties (like low tension and compression set) with good flex fatigue and long term stability (thermal, UV and ozone). The products have excellent fluid resistance over a wide temperature range. Our compounds can be processed using standard thermoplastic processing techniques such as injection molding, extrusion and blow molding. As a result, total system costs are lower than for traditional thermoset rubber solutions. The Sarlink 3400 series contains a wide variety of grades with hardnesses from Shore A 45 to shore A 90, in black and natural colors.

Safety and regulatory requirements

This product line meets the NSF 61 (ANSI) and NSF 51 (ANSI) requirements, a standard which addresses crucial aspects of drinking water and beverage system components: the level of contaminants that leach or migrate from the material and get in touch with the drinking water or beverage should not exceed acceptable levels in finished waters. Using applications that meet these standards implicates for manufacturers that they can bypass some or all chemical testing and assures that finished products meet all requirements More and detailed information about NSF 51 or NSF 61 information and the complete list of actual Sarlink product approvals can be

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, UV resistance, or potable water contact. Information regarding these specialty grades and other Sarlink series are available





Data Sarlink 3400 general purpose grades Date of last modification: o6-Jan-10								
Typical properties	Test standard	Units S.I.	3440	3450	3460	3470	3480	3490
Density	ISO 1183	kg/m3	930	950	950	950	950	940
Hardness (5 sec delay) Extruded sample Injection molded sample	ISO 868	Shore A or D	42A 47A	55A 57A	64A 67A	70A 74A	81A 85A	90A 93A
Tensile properties <i>Flow direction</i> Tensile strength at break Modulus at 100% elongation Elongation at break	ISO 37	MPa MPa %	2,4 2,4 215	4,2 2,9 235	5,4 3,7 280	6,6 5 290	8,7 6,8 335	12,3 10,2 400
Cross flow direction Tensile strength at break Modulus at 100% elongation Elongation at break		MPa MPa %	4,3 1,2 620	5,2 1,8 590	6,4 2,6 650	7,6 3,4 660	9,5 4,6 710	13,7 6,7 720
Tear strength (cross flow) Unnicked angle	ISO 34 B	kN/m	17	23	33	43	52	82
Compression set 22 hrs@23°C 22 hrs@70°C 70 hrs@125°C	ISO 815	% % %	19 30 51	21 33 52	24 36 57	26 41 64	33 52 67	47 60 76
Hot air aging (cross flow direction) 168 hrs@150°C Change in hardness Retention tensile strength at break Retention modulus at 100% elongation Retention elongation at break	ISO 188	pts % % %	2 115 110 110	3 110 105 110	3 100 110 90	4 100 110 90	3 90 110 85	3 100 110 90
1000 hrs@135℃ Change in hardness Retention tensile strength at break Retention modulus at 100% elongation Retention elongation at break		pts % % %	-2 110 105 110	2 90 110 90	2 100 100 95	0 90 110 90	1 90 120 85	-1 90 110 85
Volume swell 70 hrs@125°C in IRM 903 oil	ISO 1817	%	130	130	125	120	100	70
Apparent shear viscosity @2061/s, 200°C	ISO 11443 Capillary	Pa.s	260	275	300	300	300	300

Some grades may not be available locally

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Stretching innovations



