Product Data Sheet
Sarlink® 3140

SARLINK® 3140 is a high hardness, multi-purpose thermoplastic elastomer featuring excellent compression set and high temperature performance. SARLINK® 3140 can be processed by injection molding or extrusion for applications such as grips, seals, gaskets, profiles and other articles.

Typical properties*	Test method	S.I.		U.S.	
		Typical value	Units	Typical value	Units
Hardness Shore A (5 sec) Injection molded sample Extruded sample	ASTM D-2240, 5 sec. Delay 5 sec. Delay	 46 40	 -- --	 46 40	 -- --
Specific Gravity	ASTM D-792	0.93	--	0.93	--
Stress/Strain properties Flow direction Tensile strength Modulus at 100% Elongation at break Cross direction Tensile strength Modulus at 100% Elongation at break	ASTM D-412, Die C	 2.6 1.3 328 3.8 1.02 552	 MPa MPa % MPa MPa %	 377 189 328 551 145 552	 Psi Psi % Psi Psi %
Tear Strength Cross direction Unnicked	ASTM D-624, Die C	 16	 kN/m	 91	 Pli
Compression set 22h/23°C 22h/70°C 22h/100°C	ASTM D-395, Method B	 32 34 42	 % % %	 32 34 42	 % % %
Hot air aging 168h/150°C, Cross Direction Change in hardness Retention tensile strength Retention modulus at 100% Retention elongation at break 1000h/125°C, Cross Direction Change in hardness Retention tensile strength Retention modulus at 100% Retention elongation at break	ASTM D-573	 1.2 111 106 107 3.4 103 106 110	 -- % % % -- % % %	 1.2 111 106 107 3.4 103 106 110	 -- % % % -- % % %
Volume swell 24h/121°C Oil #3 70h/125°C Oil #3	ASTM D-471	 135 133	 % %	 135 133	 % %
Rheology Apparent Shear Viscosity @ 206 1/s, 200 °C	ASTM D-3835	 254	 Pa.s	 254	 Pa.s

* Tests are conducted on injection molded plaques unless indicated otherwise.

SARLINK® 3140 is a polypropylene based elastomer, which can be processed on conventional thermoplastic equipment for injection molding and extrusion. This product has a wide processing window in most applications. Melt temperatures from 360°F to 430°F can be used. Do not exceed 450°F. Drying is recommended for extrusion and blow molding and any time the material is used from an unsealed package. Dry three (3) hours at 180°F. Drying is best accomplished in a desiccant dryer.

INJECTION MOULDING CONDITIONS		
Melt temperature		360-430°F
Barrel Temperatures	Rear Middle Front Nozzle	350-420°F 350-420°F 350-420°F 370-430°F
Mould temperature		50-150°F
Screw Speed		100-200 RPM
Back Pressure		10-150 psi
Screw		General Purpose 20:1 L/D ratio

EXTRUSION CONDITIONS		
Melt temperature		380-420°F
Barrel Temperatures	Rear Transition Metering Front Die	360-400°F 360-400°F 370-410°F 370-410°F 380-420°F
Roll Temperature		70-120°F
Screen Pack		20 to 60 mesh
Screw		General Purpose 3:1 compression ratio

PURGING
SARLINK® 3140 has excellent melt stability. Empty the barrel for idle periods of thirty (30) minutes or longer. Purge thoroughly before and after use of this product with polyethylene or polypropylene.

RECYCLING/REGRIND
This product can be reprocessed. Physical properties are generally not degraded. Dry regrind prior to reprocessing. Drying is best accomplished in a desiccant dryer.

COLORING
The use of polyolefin based color concentrates is recommended. Apply back pressure in injection molding to disperse color.

BONDING/ASSEMBLY
Thermal bonding techniques can be used to form high strength bonds. Adhesive bonding can be achieved with specialized adhesives. Bond strength is limited due to the polypropylene base of this material.

STORAGE & HANDLING
SARLINK® 3140 is available in 55 lb. foil lined bags (up to 2,200 lbs. per pallet) or 1,100 lb. polyethylene lined gaylords. It has a storage life at normal temperatures of several years. Please refer to the Material Safety Data Sheet for this grade prior to first time handling.