

SARLINK® 4380 is a highly engineered thermoplastic elastomer for use in demanding applications. SARLINK® 4380 is a flame retardant, medium hardness grade processing exceptional chemical resistance, compression set and high temperature performance. This product can be processed by injection molding or extrusion. Applications include wire and cable insulation, electrical connectors, seals gaskets and boots.

Typical properties*	Test method	S.I.		English	
		Typical value	Units	Typical value	Units
Hardness Shore A (5 sec)	ASTM D-2240	82	--	82	--
Specific Gravity	ASTM D-792	1.30	--	1.30	--
Modulus @ 100% Elongation	ASTM D-412	3.6	MPa	522	Psi
Ultimate Elongation	ASTM D-412	450	%	450	%
Tensile Strength	ASTM D-412	7.4	MPa	1073	Psi
Compression Set (22 hrs @ 70°C)	D-395	44	%	44	%
Electrical Properties UL Flammability (UL94 V-0) Oxygen Index Dielectric Constant (1MHz) Dissipation Factor (1MHz) Dielectric Strength (1" electrode in air)	UL 94 D-2863 D-150 D-150 D-149	1.2 28.2 2.86 0.0105 21.65	mm % -- -- Kv/mm	.047 28.2 2.86 0.0105 550	inches % -- -- volts/mil

* Tests are conducted on injection molded plaques.

Test temperature 25°C (77°F) except where indicated otherwise.

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SARLINK® 4380 is a polypropylene based elastomer, which can be processed on conventional thermoplastic equipment for injection molding, extrusion and blow molding. This product has a wide processing window in most applications. Melt temperatures from 360°F to 420°F can be used. Do not exceed 430°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			EXTRUSION CONDITIONS		
Melt temperature		360-420°F	Melt temperature		380-410°F
Barrel Temperatures	Rear Middle Front Nozzle	350-400°F 350-400°F 350-410°F 390-420°F	Barrel Temperatures	Rear Transition Metering Front Die	360-400°F 360-400°F 370-400°F 370-400°F 380-410°F
Mould temperature		50-150°F			
Screw Speed		100-200 RPM	Roll Temperature		70-120°F
Back Pressure		10-150 psi	Screen Pack		20 to 60 mesh
Screw	General Purpose 20:1 L/D ratio		Screw	General Purpose 3:1 compression ratio	

PURGING

SARLINK® 4380 has good 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® 4380 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.

