

A highly engineered Thermoplastic Elastomer for use in demanding applications. Sarlink® 9180 is a medium hardness grade possessing exceptional tensile strength, superior compression set, chemical resistance and high temperature performance. It is ideally suited for the extrusion of setting blocks, glazing seals, gaskets and other profiles for architectural and residential applications

Typical Properties*	Test Method	S.I.		U.S.	
		Typical Value	Units	Typical Value	Units
<b>Hardness shore A (5 sec)</b> Injection moulded sample Extruded sample	ASTM D-2240 5 sec. delay 5 sec. delay	83 79		83 79	
<b>Specific gravity</b>	ASTM D-792	0.96		0.96	
<b>Stress/strain properties</b> <u>Cross direction</u> Tensile strength Modulus 100% Elongation at break	ASTM D-412 Die C	10.5 4.7 501	MPa MPa %	1523 682 501	Psi Psi %
<b>Tear strength</b> <u>Cross direction</u> Unnicked	ASTM D-624 Die C	48	kN/m	274	Pli
<b>Compression set</b> 22h/23°C 22h/70°C	ASTM D-395 Method B	32 35	% %	32 35	% %
<b>Hot air aging</b> <u>168h/150°C, Cross Direction</u> Change in hardness Retention tensile strength Retention modulus at 100% Retention elongation at break	ASTM D-573	2.4 90 102 85	- % % %	2.4 90 102 85	- % % %
<b>Rheology</b> <u>Apparent Shear Viscosity</u> @ 206 1/s, 200°C	ASTM D-3835	348	Pa.s	348	Pa.s

\* Tests are conducted on injection moulded plaques unless indicated otherwise.

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Sarlink® 9180 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 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.

INJECTION MOULDING CONDITIONS			EXTRUSION CONDITIONS		
Melt temperature		360-430°F	Melt temperature		380-420°F
Barrel Temperatures	Rear	350-420°F	Barrel Temperatures	Rear	360-400°F
	Middle	350-420°F		Transition	360-400°F
	Front	350-420°F		Metered	370-410°F
	Nozzle	370-430°F		Front	370-410°F
	Die	380-420°F			
Mold Temperature		50-150°F			
Screw Speed		100-200 RPM	Roll Temperatures		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® 9180 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.

#### COLORING

The use of polyolefin based color concentrates is recommended. Apply back pressure in injection molding prior 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® 9180 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.

DSM Thermoplastic Elastomers Inc. is an ISO 9001 registered company

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