s o



# Sarlink® 9175N3

## **Product Data Sheet**

A medium hardness, thermoplastic elastomer. Sarlink® 9175N3 is specially formulated to provide superior dimensional stability for the extrusion of glazing seals, gaskets, and other profiles. Can be co-extruded with olefin materials. Sarlink® 9175N3 exhibits superior low temperature performance and flex fatique properties.

	S.I.		ıl.	U.S.	
Typical Properties*	Test Method	Typical Value	Units	Typical Value	Units
Hardness shore A (5 sec) Injection moulded sample Extruded sample	ASTM D-2240 5 sec. delay 5 sec. delay	73 71		73 71	
Specific gravity	ASTM D-792	0.94		0.94	
Stress/strain properties Cross direction Tensile strength Modulus 100% Elongation at break	ASTM D-412 Die C	7.7 3.1 683	MPa MPa %	1117 450 683	Psi Psi %
Tear strength Cross direction Unnicked	ASTM D-624 Die C	42	kN/m	239	Pli
Compression set 22h/70°C 22h/100°C	ASTM D-395 Method B	43 47	% %	43 47	% %
Hot air aging 168h/150°C, Cross Direction Change in hardness Retention tensile strength Retention Modulus at 100% Retention elongation at break	ASTM D-573	2.7 96 105 86	- % %	2.7 96 105 86	- % %
Rheology Apparent Shear Viscosity @ 206 1/s, 200°C	ASTM D-3835	300	Pa.s	300	Pa.s

<sup>\*</sup> Tests are conducted on injection moulded plaques unless indicated otherwise.







≥

S





### Processing & Handling Guide

Sarlink® 9175N3 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°-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 Middle Front Nozzle	350-420°F 350-420°F 350-420°F 370-430°F	Barrel Temperatures	Rear Transition Metered Front Die	360-400°F 360-400°F 370-410°F 370-410°F 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® 9175N3 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® 9175N3 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 Sarlink© is a registered trademark of DSM, The Netherlands





