

Sarlink® XRD-5755B4

Product Data Sheet

A highly engineered Thermoplastic Elastomer for use in demanding applications. Sarlink® 5755B4 is a UV stable low hardness grade possessing exceptional tensile strength, superior compression set, chemical resistance and high temperature performance. It can be easily processed by extrusion, injection molding or blow molding for various applications such as glass run channels, waistbelts, weatherstrips, seals and other profiles and articles

	Test Method	S.I.		U.S.	
Typical Properties*		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	57 55		57 55	
Specific gravity	ASTM D-792	0.97		0.97	
Stress/strain properties Flow direction Tensile strength Modulus 100% Elongation at break Cross direction Tensile strength Modulus 100% Elongation at break	ASTM D-412 Die C	3.7 2.1 297 4.6 1.8 420	MPa MPa % MPa MPa MPa %	537 305 297 667 261 420	Psi Psi % Psi Psi %
Tear strength Cross direction Trouser	ASTM D-624	23	kN/m	131	Pli
Compression set 22h/23°C 22h/70°C 70h/125°C	ASTM D-395 Method B	20 27 42	% % %	20 27 42	% % %
Hot air aging 168h/150°C, Cross Direction Change in hardness Retention tensile strength Retention modulus at 100% Retention elongation at break 1000h/135°C, Cross Direction Change in hardness Retention tensile strength Retention modulus at 100% Retention elongation at break	ASTM D-573	3 96 98 109 4 96 106 103	- % % % - %	3 96 98 109 4 96 106 103	- % % % - %
Volume swell 70h/125°C Oil #3	ASTM D-471	87	%	87	%
Rheology Apparent Shear Viscosity @ 206 1/s, 200°C	ASTM D-3835	315	Pa.s	315	Pa.s

^{*} Tests are conducted on injection moulded plaques unless indicated otherwise.







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Sarlink® XRD-5755B4

Processing & Handling Guide

Sarlink® XRD-5755B4 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® XRD-5755B4 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® XRD-5755B4is 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.

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