Product Data Sheet
Sarlink® 3140

SARLINK® 3140 is a low hardness, multi-purpose thermoplastic elastomer featuring excellent compression set and heat resistance. SARLINK® 3140 can be processed by injection molding or extrusion for applications such as seals, gaskets, diaphrams and profiles.

Typical properties*	Test method	Typical value	Units S.I.
Density	ISO 1183	930	Kg/m^3
Hardness shore A (5 sec) Extruded sample Injection molded sample	ISO 868	 40 48	
Stress/strain properties Flow direction Modulus 100% Tensile strength Elongation at break Cross direction Modulus 100% Tensile strength Elongation at break	ISO 37 (II)	 2.5 2.5 204 2.5 5.0 600	 MPa MPa % MPa MPa %
Tear strength (cross direction) Trouser Unnicked angle	 ISO 34 A ISO 34 B (a)	 7 17	 kN/m kN/m
Compression set 72h/23°C 22h/70°C 22h/100°C	ISO 815	 25 30 45	 % % %
Hot air aging 1000h/125°C Change in hardness Retention tensile strength Retention elongation at break 336h/150°C Change in hardness Retention tensile strength Retention elongation at break	ISO 188	 +3 103 110 +1 94 115	 pts % % pts % %
Volume swell 72h/100°C water 168 h/100°C ASTM oil 1 168h/23°C ref. fuel B	ISO 1817	 +3 +60 +147	 % % %

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

a DSM Product

Sarlink®

SARLINK® 3140 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 185°C to 220°C can be used. Do not exceed 260°C. Drying is recommended for extrusion and blow molding (3 hours at 80°C). Drying is best accomplished in a desiccant dryer.

INJECTION MOULDING CONDITIONS		
Melt temperature		185-220°C
Barrel Temperatures	Rear Middle Front Nozzle	180-215°C 180-215°C 180-215°C 187-220°C
Mould temperature		10-55°C
Screw Speed		100-200 RPM
Back Pressure		0.1-1 MPa
Screw	General Purpose	

EXTRUSION CONDITIONS		
Melt temperature		195-215°C
Barrel Temperatures	Rear Transition Metering Front Die	180-200°C 180-205°C 187-210°C 187-210°C 195-215°C
Roll Temperature		20-50°C
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 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.

COLOURING
The use of polyolefin based color concentrates is recommended. Apply backpressure 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. Adhesive bond strength is limited due to the polypropylene base of this material.

STORAGE & HANDLING
SARLINK® 3140 is available in 20 kg polyethylene bags (1000 kg per pallet). 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.