

## **VECTOR 4111A / VECTOR 4111N** **Styrene-Isoprene-Styrene (SIS) Block Copolymers**

- Linear SIS <sup>(1)</sup> triblock copolymer.
- Contains <1% diblock copolymer.
- Low styrene, low modulus.

VECTOR 4111A and VECTOR 4111N styrenic block copolymers are linear triblock copolymers with narrow molecular weight distributions. They are the softest pure triblock copolymers offered and show outstanding melt processability and elasticity, making them well-suited for use in elastomer compounds and polymer modification applications. The pure triblock also makes them well-suited for use in high shear, pressure sensitive adhesive applications.

- VECTOR 4111A SIS is offered as a dense pellet supplied from the United States.
- VECTOR 4111N SIS is offered as a porous pellet supplied from China.

Polymer Properties	Test Method	Units	Typical Value <sup>(2)</sup>
Styrene	TSRC / Dexco Method	wt%	18
Diblock Content	TSRC / Dexco Method	wt%	<1
Melt Flow Rate (200°C/5kg)	ASTM D1238	g/10 min	12
Solution Viscosity <sup>(3)</sup>	ASTM D2196	cps	850
Ash	ASTM D5630	wt%	0.4
<b>Physical Properties</b>			
Tensile at Break <sup>(4)</sup>	ISO 37	MPa	26
Stress at 300% Elongation <sup>(4)</sup>	ISO 37	MPa	1.3
Elongation at Break <sup>(4)</sup>	ISO 37	%	1200
Hardness <sup>(5)</sup>	ASTM D2240	Shore A	40
Bulk Density	ASTM D1895	g/cm <sup>3</sup>	0.55 (4111A) 0.33 (4111N)
Specific Gravity	ASTM D792		0.92

1) SIS denotes a linear styrene-isoprene-styrene triblock copolymer.

2) Not to be construed as specifications.

3) 25 wt% in Toluene; 25°C.

4) Roll-milled, compression-molded plaques.

5) Dwell time - 1 second.

VECTOR 4111A and VECTOR 4111N styrenic block copolymers are produced via TSRC / Dexco's proprietary anionic polymerization technology.

VECTOR styrenic block copolymers are available in a number of different packaging types. Consult your TSRC / Dexco Sales Representative for more information on packaging options and for regulatory compliance information.

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TSRC / Dexco has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our Product Stewardship philosophy by which we assess the safety, health and environmental information on our products and then take appropriate steps to protect employee and public health, and our environment. The success of our Product Stewardship program rests with each and every individual involved with TSRC / Dexco products – from the initial concept and research, to manufacture, use, sale, and disposal of each product.

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## **MEDICAL APPLICATION POLICY:**

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