

VECTOR 4113A / VECTOR 4113N

Styrene-Isoprene-Styrene / Styrene-Isoprene (SIS/SI) Block Copolymer Blends

- Blend of linear SIS ⁽¹⁾ triblock and SI ⁽¹⁾ diblock copolymer.
- Contains ~18% SI diblock copolymer.
- Low styrene, low modulus.

VECTOR 4113A and VECTOR 4113N styrenic block copolymers are blended products composed of a linear SIS triblock copolymer and an SI diblock copolymer. They are softer than VECTOR 4111A SIS/SI due to lower styrene content and presence of diblock copolymer, making them well-suited for use in hot melt pressure sensitive adhesives, elastomer compounds and photopolymer plate applications.

- VECTOR 4113A SIS/SI is offered as a dense pellet supplied from the United States.
- VECTOR 4113N SIS/SI is offered as a porous pellet supplied from China.

Polymer Properties	Test Method	Units	Typical Value ⁽²⁾
Styrene	TSRC / Dexco Method	wt%	15
Diblock Content	TSRC / Dexco Method	wt%	18
Melt Flow Rate (200°C/5kg)	ASTM D1238	g/10 min	11
Solution Viscosity ⁽³⁾	ASTM D2196	cps	1240
Ash	ASTM D5630	wt%	0.3
Physical Properties			
Tensile at Break ⁽⁴⁾	ISO 37	MPa	20
Stress at 300% Elongation ⁽⁴⁾	ISO 37	MPa	0.8
Elongation at Break ⁽⁴⁾	ISO 37	%	1300
Hardness ⁽⁵⁾	ASTM D2240	Shore A	33
Bulk Density	ASTM D1895	g/cm ³	0.55 (4113A) 0.33 (4113N)
Specific Gravity	ASTM D792		0.92

- 1) SIS denotes a linear styrene-isoprene-styrene triblock copolymer; SI denotes a styrene-isoprene diblock 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 4113A and VECTOR 4113N 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 strongly encourages its customers to review both their manufacturing processes and their applications of TSRC / Dexco products from the standpoint of human health and environmental quality to ensure that the products are not used in ways for which they are not intended or tested. TSRC / Dexco personnel are available to answer your questions and to provide reasonable technical support. TSRC / Dexco product literature, including safety data sheets, should be consulted prior to use of the products. Contact your TSRC / Dexco sales representative or visit www.tsrc.com.tw for more information.

MEDICAL APPLICATION POLICY:

TSRC / Dexco will not knowingly sell or sample **VECTOR 4113A SIS/SI** into any commercial or developmental application that is intended for: (a) long term contact (>72 continuous hours) with internal body fluids or internal body tissues; (b) use in cardiac prosthetic devices regardless of the length of time involved (including, but not limited to, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assist devices); (c) use as a critical component in medical devices that support or sustain human life; (d) use specifically by pregnant women, or in applications designed to promote or interfere with human reproduction; or (e) use in pharmaceutical applications, other than pharmaceutical packaging.

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