

## VECTOR<sup>®</sup> 4211S Styrene-Isoprene-Styrene (SIS) Block Copolymers

VECTOR<sup>®</sup> 4211S is a linear triblock copolymer with narrow molecular weight distributions.

The product exhibits the following characteristics:

- High styrene content and high modulus.
  - Well-suited for use in elastomer compounds, polymer modification and pressure sensitive adhesive applications requiring high cohesion.
- VECTOR<sup>®</sup> 4211S (SIS) is offered as a dense pellet supplied from United States.

Polymer Properties	Test Method	Unit	Typical Value <sup>(1)</sup>
Specific Gravity	ASTM D792	-	0.94
Hardness <sup>(2)</sup>	ASTM D2240	Shore A	60
Tensile at Break <sup>(3)</sup>	ISO 37	MPa	24
Stress at 300% Elongation <sup>(3)</sup>	ISO 37	MPa	4.2
Elongation at Break <sup>(3)</sup>	ISO 37	%	1000
Solution Viscosity <sup>(4)</sup>	ASTM D2196	cP	300

Sales Specification	Test Method	Unit	Range	
			Min	Max
Styrene	TSRC Method	wt%	28.0	31.0
Diblock Content	TSRC Method	wt%	-	1.0
Volatile Matter	TSRC Method	wt%	-	1.00
Ash	ASTM D5630	wt%	0.05	0.50
Melt Flow Rate (200°C/5kg)	ASTM D1238	g/10 min	10.0	16.0

- 1) Typical values intended only as guides and should not to be construed as specifications  
 2) Dwell time - 1 second  
 3) Roll-milled, compression-molded plaques  
 4) 25 wt% in Toluene; 25°C

VECTOR<sup>®</sup> 4211S styrenic block copolymers are produced via TSRC Specialty Materials LLC's proprietary anionic polymerization technology.

VECTOR<sup>®</sup> styrenic block copolymers are available in several different packaging types. Consult your TSRC Specialty Materials LLC Sales Representative for more information on packaging options and regulatory compliance information.



## PRODUCT STEWARDSHIP:

TSRC Specialty Materials LLC 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 products – from the initial concept and research, to manufacture, use, sale, and disposal of each product.

## CUSTOMER NOTICE:

TSRC Specialty Materials LLC strongly encourages its customers to review both their manufacturing processes and their applications of TSRC Specialty Materials LLC 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 Specialty Materials LLC personnel are available to answer your questions and to provide reasonable technical support. TSRC Specialty Materials LLC product literature, including safety data sheets, should be consulted prior to use of the products. Contact your TSRC Specialty Materials LLC Sales Representative or visit [www.tsrc.com.tw](http://www.tsrc.com.tw) for more information.

## MEDICAL APPLICATION POLICY:

TSRC Specialty Materials LLC will not knowingly sell or sample **VECTOR 4211S** 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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