

VECTOR 4230

Styrene-Isoprene (SI)n Block Copolymer

- Four arm radial block copolymer.
- High strength with low viscosity.
- High modulus, high cohesive strength.
- VECTOR styrenic block copolymers find use under certain FDA regulations as articles or as ingredients in articles intended for food contact or medical applications. Please contact your Dexco Polymers agent for a detailed letter of certification or further information.

VECTOR 4230 styrene-isoprene radial copolymer is produced via anionic polymerization technology from Dexco Polymers LP, a Dow/ ExxonMobil Venture.

VECTOR 4230 is a styrene-isoprene radial copolymer with a styrene content centered at 20.5%. It is made with a patented coupling process that yields a polymer primarily with a 4-arm radial architecture. The process also has the flexibility to target a wide range of coupling efficiency, with that of VECTOR 4230 targeted at 70%, i.e., 30% diblock. The radial structure provides viscosity shear thinning as well as higher modulus, cohesive strength, and heat resistance versus linear SIS/SI with comparable styrene content and MFR. The properties of VECTOR 4230 are ideally suited for pressure sensitive applications requiring high strength, low viscosity, and easy melt processing.

Properties	Test Method	Unit	Typical Value
<i>Resin Properties</i>			
Styrene	Dexco Method	Wt. %	20
Diblock Content	Dexco Method	Wt. %	30
MFR ⁽¹⁾	ASTM D 1238	g/ 10 min	14
Ash	ASTM D 1416	Wt. %	0.3
<i>Physical Properties</i>			
Tensile Strength ⁽²⁾	ASTM D 412	PSI	1940
Elongation ⁽²⁾	ASTM D 412	%	1075
Hardness ⁽³⁾	ASTM D 2240	Shore A	45
Specific Gravity	ASTM D 792	g/cc	0.94
<i>Product Form</i>			Dense Pellet

- (1) Condition (200°C/ 5 kg).
- (2) Typical values on compression molded plaques, intended only as guides, and should not be construed as specifications.
- (3) 1 sec. dwell.



PRODUCT STEWARDSHIP:

Dexco Polymers LP 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 Dexco products – from the initial concept and research, to manufacture, use, sale, and disposal of each product.

CUSTOMER NOTICE:

Dexco Polymers LP strongly encourages its customers to review both their manufacturing processes and their applications of Dexco products from the standpoint of human health and environmental quality to ensure that Dexco products are not used in ways for which they are not intended or tested. Dexco Polymers personnel are available to answer your questions and to provide reasonable technical support. Dexco product literature, including safety data sheets, should be consulted prior to use of Dexco products. Your Dexco Polymers sales representative can arrange the proper contacts, or write to Dexco Polymers LP, 12012 Wickchester, Suite 280, Houston, Texas 77079 U.S.A.

MEDICAL APPLICATION POLICY:

Dexco Polymers LP will not knowingly sell or sample any Dexco styrenic block copolymer product(s) 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.

Authorized distributors and resellers will adhere to this medical policy.

Dexco Polymers LP does not endorse or claim suitability of their products for specific medical applications. It is the responsibility of the medical device or pharmaceutical manufacturer to determine that the Dexco product is safe, lawful, and technically suitable for the intended use. DEXCO POLYMERS MAKES NO WARRANTIES, EXPRESS OR IMPLIED, CONCERNING THE SUITABILITY OF ANY DEXCO PRODUCT FOR USE IN MEDICAL APPLICATIONS.

DISCLAIMERS:

NOTICE: No freedom from any patent owned by Dexco Polymers LP or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, the Customer is responsible for determining whether products and the information in this document are appropriate for the Customer's use and for ensuring that the Customer's workplace and disposal practices are in compliance with applicable laws and other governmental enactments. Dexco Polymers LP assumes no obligation or liability for the information in this document. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

NOTICE: If products are described as "experimental" or "developmental": (1) product specifications may not be fully determined; (2) analysis of hazards and caution in handling and use are required; and (3) there is greater potential for Dexco Polymers to change specifications and/or discontinue production.

Published June 2007