

# VECTOR 6241

## Styrene-Butadiene-Styrene (SBS) Block Copolymer

- SBS<sup>(1)</sup> triblock copolymer.
- Contains <1% diblock copolymer.
- High styrene, low viscosity and high modulus copolymer.
- Outstanding thermal stability and melt processability.
- Supplied as a porous pellet, dusted with talc.
- VECTOR styrenic block copolymers find use under certain 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 6241 styrene-butadiene-styrene block copolymer is produced via proprietary sequential anionic polymerization technology from Dexco Polymers LP, a Dow/ExxonMobil Venture. It is formulated with the antioxidant TNPP (tris(nonylphenyl) phosphite).

It has high modulus and low creep properties. It has the lowest elasticity of the SBS family of products. It is a high performance, flexible thermoplastic resin that is designed for use as an impact modifier in styrenics and compatibilizer in styrenic/olefin blends. It has excellent physical strength and outstanding melt processability.

<b>Properties</b>			
<b><i>Polymer Properties</i></b>	<b>Test Method</b>	<b>Unit</b>	<b>Typical Values <sup>(2)</sup></b>
Styrene	Dexco Method	Wt. %	43
Diblock Content	Dexco Method	Wt. %	<1
Melt Flow Rate <sup>(3)</sup>	ASTM D 1238	dg/min	23
Solution Viscosity <sup>(4)</sup>	ASTM D 2196	cps	850
Volatiles	Dexco Method	Wt. %	0.4
Ash	ASTM D 1416	Wt. %	0.5
<b><i>Physical Properties</i></b>			
Tensile Strength <sup>(5)</sup>	ASTM D 412	PSI (MPa)	4500 (31.0)
300% Modulus <sup>(5)</sup>	ASTM D 412	PSI (MPa)	1200 (8.3)
Elongation at Break <sup>(5)</sup>	ASTM D 412	%	700
Hardness <sup>(6)</sup>	ASTM D 2240	Shore A	87
Specific Gravity	ASTM D 792		0.96

- (1) "SBS" denotes linear styrene-butadiene-styrene block copolymer.
- (2) Typical values, intended only as guides, and should not be construed as specifications.
- (3) Condition 200°C/5 kg.
- (4) 25 Wt. % in toluene at 25°C.
- (5) Tested on roll milled/compression molded plaques (0.035" thick). Tested in the machine direction.
- (6) 1 sec. dwell. .

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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.

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