

VECTOR 4461

Styrene-Butadiene-Styrene (SBS) Block Copolymer

- SBS⁽¹⁾ triblock copolymer.
- Contains <1% diblock copolymer.
- High styrene, high melt flow block copolymer.
- 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 4461 linear, pure SBS 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 the lowest elasticity of the SBS family of products while providing high modulus, low creep resistance, excellent cohesive strength, and good melt processability. It is particularly suited for hot melt adhesives requiring high strength and low viscosity.

Properties			
<i>Polymer Properties</i>	Test Method	Unit	Typical Values ⁽²⁾
Styrene	Dexco Method	Wt. %	43
Diblock Content	Dexco Method	Wt. %	<1
Melt Flow Rate ⁽³⁾	ASTM D 1238	dg/min	23
Solution Viscosity ⁽⁴⁾	ASTM D 2196	cps	850
Volatiles	Dexco Method	Wt. %	0.4
Ash	ASTM D 1416	Wt. %	0.5
<i>Physical Properties</i>			
Tensile Strength ⁽⁵⁾	ASTM D 412	PSI (MPa)	4500 (31.0)
300% Modulus ⁽⁵⁾	ASTM D 412	PSI (MPa)	1200 (8.3)
Elongation at Break ⁽⁵⁾	ASTM D 412	%	700
Hardness ⁽⁶⁾	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. Tested in the machine direction.
- (6) 1 sec. dwell.

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