

VECTOR 4230

Styrene-Isoprene (SI)_n Block Copolymer

- Radial (SI)_n⁽¹⁾ block copolymer.
- Contains ~30% SI diblock copolymer.
- High strength with low viscosity.
- High modulus, high cohesive strength.
- Supplied as a dense 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 4230 styrene-isoprene radial copolymer is produced via proprietary anionic polymerization technology from Dexco Polymers LP, a Dow/ExxonMobil Venture. It is formulated with the antioxidant TNPP (tris(nonylphenyl) phosphite).

It is made with a patented coupling process that yields a polymer primarily with a 4-arm radial architecture. 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 melt flow rate. It is ideally suited for pressure sensitive applications requiring high strength, low viscosity, and easy melt processing.

Properties			
<i>Polymer Properties</i>	Test Method	Unit	Typical Values ⁽²⁾
Styrene	Dexco Method	Wt. %	20
Diblock Content	Dexco Method	Wt. %	30
Melt Flow Rate ⁽³⁾	ASTM D 1238	dg/min	14
Volatiles	Dexco Method	Wt. %	0.3
Ash	ASTM D 1416	Wt. %	0.3
<i>Physical Properties</i>			
Tensile Strength ⁽⁴⁾	ASTM D 412	PSI (MPa)	2000 (13.8)
300% Modulus ⁽⁴⁾	ASTM D 412	PSI (MPa)	270
Elongation at Break ⁽⁴⁾	ASTM D 412	%	1200
Hardness ⁽⁵⁾	ASTM D 2240	Shore A	46
Specific Gravity	ASTM D 792		0.94

(1) "(SI)_n denotes radial styrene-isoprene block copolymer.

(2) Typical values, intended only as guides, and should not be construed as specifications.

(3) Condition 200°C/5 kg.

(4) Tested on roll milled/compression molded plaques (0.035" thick). Tested in the machine direction.

(5) 1 sec. dwell.

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