

## VECTOR 8508A

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

- SBS<sup>(1)</sup> triblock copolymer.
- Contains <1% diblock copolymer.
- Medium styrene, low modulus copolymer.
- Outstanding thermal stability and excellent 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 8508A styrene-butadiene-styrene block copolymer is produced via proprietary sequential anionic polymerization technology from Dexco Polymers LP, a Dow/ExxonMobil Venture. It is not formulated with the antioxidant TNPP (tris(nonylphenyl) phosphite).

It has excellent thermoplastic elastomer properties, melt processability, and physical strength. It has superior melt processability when compared to VECTOR 2518A SBS. It is designed for use as an impact/toughness modifier in styrenics, in elastomeric film applications, and in formulating adhesives.

<b>Properties</b>			
<b>Polymer Properties</b>	<b>Test Method</b>	<b>Unit</b>	<b>Typical Values <sup>(2)</sup></b>
Styrene	Dexco Method	Wt. %	29
Diblock Content	Dexco Method	Wt. %	<1
Melt Flow Rate <sup>(3)</sup>	ASTM D 1238	dg/min	12
Solution Viscosity <sup>(4)</sup>	ASTM D 2196	cps	400
Volatiles	Dexco Method	Wt. %	0.4
Ash	ASTM D 1416	Wt. %	0.8
<b>Physical Properties</b>			
Tensile Strength <sup>(5)</sup>	ASTM D 412	PSI (MPa)	4800 (33.1)
300% Modulus <sup>(5)</sup>	ASTM D 412	PSI (MPa)	530 (3.7)
Elongation at Break <sup>(5)</sup>	ASTM D 412	%	1100
Hardness <sup>(6)</sup>	ASTM D 2240	Shore A	65
Specific Gravity	ASTM D 792		0.94
<b>Elastic Properties</b>			
Peak Force @ 500% strain	Stress Relaxation <sup>(7)</sup>	PSI (MPa)	890 (6.1)
Set after 500% strain	Stress Relaxation <sup>(7)</sup>	%	15.0
Peak Force @ 200% strain (A)	Stress Relaxation <sup>(7)</sup>	PSI (MPa)	270 (1.8)
Relaxation @ 200% strain	Stress Relaxation <sup>(7)</sup>	%	9.1
Unload @ 50% strain (B)	Stress Relaxation <sup>(7)</sup>	PSI (MPa)	100 (0.7)
Ratio (A:B)	Stress Relaxation <sup>(7)</sup>		2.74

- (1) "SBS" denotes linear styrene-butadiene-styrene block polymer.
- (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 transverse direction.
- (6) 1 sec. dwell.
- (7) Described in US 7,445,831 patent. Tested on roll milled/compression molded plaques (0.035" thick). Tested in the transverse direction at room temperature.

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