

VECTOR 4293A

Styrene-Isoprene (SI)_n Block Copolymer

- Radial (SI)_n⁽¹⁾ block copolymer.
- Contains ~25% SI⁽¹⁾ diblock copolymer.
- Medium styrene.

VECTOR 4293A styrenic block copolymer is a radial block copolymer with a narrow molecular weight distribution. The radial structure provides adhesives with lower viscosity as well as higher modulus, cohesive strength, and heat resistance than comparable linear SIS/SI. It can be used as a base for hot melt adhesives with low viscosity, good heat resistance, and excellent adhesion to low energy surfaces. It is also well-suited for use in hygiene, specialty packaging and bookbinding applications.

- VECTOR 4293A (SI)_n is offered as a dense pellet supplied from the United States.

Polymer Properties	Test Method	Units	Typical Value ⁽²⁾
Styrene	TSRC / Dexco Method	wt%	30
Diblock Content	TSRC / Dexco Method	wt%	25
Melt Flow Rate (200°C/5kg)	ASTM D1238	g/10 min	11
Solution Viscosity ⁽³⁾	ASTM D2196	cps	280
Ash	ASTM D5630	wt%	0.3
Physical Properties			
Tensile at Break ⁽⁴⁾	ISO 37	MPa	11
Stress at 300% Elongation ⁽⁴⁾	ISO 37	MPa	3.2
Elongation at Break ⁽⁴⁾	ISO 37	%	1100
Hardness ⁽⁵⁾	ASTM D2240	Shore A	61
Bulk Density	ASTM D1895	g/cm ³	0.55
Specific Gravity	ASTM D792		0.94

1) (SI)_n denotes a radial styrene-isoprene block copolymer; SI denotes a styrene-isoprene diblock copolymer.

2) Not to be construed as specifications.

3) 25 wt% in Toluene; 25°C.

4) Roll-milled, compression-molded plaques.

5) Dwell time - 1 second.

TSRC