

# VECTOR 2411P

## Styrene-Butadiene (SB)<sub>n</sub> Block Copolymer

- Radial (SB)<sub>n</sub><sup>(1)</sup> block copolymer.
- Contains ~10% SB diblock copolymer.
- Medium styrene, high modulus copolymer.
- Product form is powder, dusted with talc.

VECTOR 2411P styrene-butadiene block copolymer is produced via anionic polymerization technology from Dexco Polymers LP, a Dow/ExxonMobil Venture.

It is a very high viscosity, powder product. It has outstanding physical strength and is designed for use in asphalt modification, elastomeric compounds, and adhesive formulations.

| <b>Properties</b>                  |                    |             |                                    |
|------------------------------------|--------------------|-------------|------------------------------------|
| <b><i>Polymer Properties</i></b>   | <b>Test Method</b> | <b>Unit</b> | <b>Typical Value<sup>(2)</sup></b> |
| Styrene                            | Dexco Method       | Wt. %       | 30                                 |
| Diblock Content                    | Dexco Method       | Wt. %       | 12                                 |
| Melt Flow Rate <sup>(3)</sup>      | ASTM D 1238        | dg/min      | <1                                 |
| Solution Viscosity <sup>(4)</sup>  | ASTM D 2196        | cps         | 21                                 |
| Volatiles                          | Dexco Method       | Wt. %       | 0.3                                |
| Ash                                | ASTM D 1416        | Wt. %       | 5.0                                |
| <b><i>Physical Properties</i></b>  |                    |             |                                    |
| Tensile Strength <sup>(5)</sup>    | ASTM D 412         | PSI (MPa)   | 4000 (27.6)                        |
| 300% Modulus <sup>(5)</sup>        | ASTM D 412         | PSI (MPa)   | 650 (4.5)                          |
| Elongation at Break <sup>(5)</sup> | ASTM D 412         | %           | 725                                |
| Hardness <sup>(6)</sup>            | ASTM D 2240        | Shore A     | 71                                 |
| Specific Gravity                   | ASTM D 792         |             | 0.94                               |

- (1) "(SB)<sub>n</sub>" denotes radial, styrene-butadiene block copolymer.
- (2) Typical values, intended only as guides, and should not be construed as specifications.
- (3) Condition 200°C/5 kg.
- (4) 5 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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