

## VECTOR 4113A / VECTOR 4113N

### Styrene-Isoprene-Styrene / Styrene-Isoprene (SIS/SI) Block Copolymer Blends

- Blend of linear SIS <sup>(1)</sup> triblock and SI <sup>(1)</sup> diblock copolymer.
- Contains ~18% SI diblock copolymer.
- Low styrene, low modulus.

VECTOR 4113A and VECTOR 4113N styrenic block copolymers are blended products composed of a linear SIS triblock copolymer and an SI diblock copolymer. They are softer than VECTOR 4111A SIS/SI due to lower styrene content and presence of diblock copolymer, making them well-suited for use in hot melt pressure sensitive adhesives, elastomer compounds and photopolymer plate applications.

- VECTOR 4113A SIS/SI is offered as a dense pellet supplied from the United States.
- VECTOR 4113N SIS/SI is offered as a porous pellet supplied from China.

| Polymer Properties                       | Test Method         | Units             | Typical Value <sup>(2)</sup> |
|------------------------------------------|---------------------|-------------------|------------------------------|
| Styrene                                  | TSRC / Dexco Method | wt%               | 15                           |
| Diblock Content                          | TSRC / Dexco Method | wt%               | 18                           |
| Melt Flow Rate (200°C/5kg)               | ASTM D1238          | g/10 min          | 11                           |
| Solution Viscosity <sup>(3)</sup>        | ASTM D2196          | cps               | 1240                         |
| Ash                                      | ASTM D5630          | wt%               | 0.3                          |
| Physical Properties                      |                     |                   |                              |
| Tensile at Break <sup>(4)</sup>          | ISO 37              | MPa               | 20                           |
| Stress at 300% Elongation <sup>(4)</sup> | ISO 37              | MPa               | 0.8                          |
| Elongation at Break <sup>(4)</sup>       | ISO 37              | %                 | 1300                         |
| Hardness <sup>(5)</sup>                  | ASTM D2240          | Shore A           | 33                           |
| Bulk Density                             | ASTM D1895          | g/cm <sup>3</sup> | 0.55 (4113A)<br>0.33 (4113N) |
| Specific Gravity                         | ASTM D792           |                   | 0.92                         |

- 1) SIS denotes a linear styrene-isoprene-styrene triblock 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**