

# Trexprene® A70CI

Thermoplastic Vulcanizate

Mitsubishi Chemical Performance Polymers, Inc.

## Message:

Product Description: TREXPENE ® A70CI is a heat stabilized and UV Stabilized PP/EPDM based Thermoplastic Vulcanized Elastomer (TPV). This pre-colored compound is for interior applications. This material can be processed using Injection Molding, Extrusion, Blow Molding or other melt processing techniques.

| General Information              |                           |                   |             |
|----------------------------------|---------------------------|-------------------|-------------|
| Additive                         | Heat Stabilizer           |                   |             |
|                                  | UV Stabilizer             |                   |             |
| Features                         | Good UV Resistance        |                   |             |
|                                  | Heat Stabilized           |                   |             |
| Uses                             | Automotive Interior Parts |                   |             |
| Appearance                       | Unspecified Color         |                   |             |
| Forms                            | Pellets                   |                   |             |
| Processing Method                | Blow Molding              |                   |             |
|                                  | Extrusion                 |                   |             |
|                                  | Injection Molding         |                   |             |
| Physical                         | Nominal Value             | Unit              | Test Method |
| Density                          | 0.910 to 0.990            | g/cm <sup>3</sup> | ISO 1183    |
| Hardness                         | Nominal Value             | Unit              | Test Method |
| Shore Hardness (Shore A, 15 sec) | 70 to 78                  |                   | ISO 868     |
| Elastomers                       | Nominal Value             | Unit              | Test Method |
| Tensile Stress <sup>1</sup>      |                           |                   | ISO 37      |
| Across Flow : 100% Strain        | 2.80                      | MPa               |             |
| Flow : 100% Strain               | 3.60                      | MPa               |             |
| Tensile Stress <sup>2</sup>      |                           |                   | ISO 37      |
| Across Flow : Break              | 5.50                      | MPa               |             |
| Flow : Break                     | 5.70                      | MPa               |             |
| Tensile Elongation <sup>3</sup>  |                           |                   | ISO 37      |
| Across Flow : Break              | 620                       | %                 |             |
| Flow : Break                     | 510                       | %                 |             |
| Tear Strength <sup>4</sup>       |                           |                   | ISO 34-1    |
| Across Flow                      | 27                        | kN/m              |             |
| Flow                             | 27                        | kN/m              |             |
| Compression Set                  |                           |                   |             |
| 70°C, 24 hr                      | 33                        | %                 | ASTM D395B  |

|                                                           |                                                            |             |                    |
|-----------------------------------------------------------|------------------------------------------------------------|-------------|--------------------|
| 70°C, 24 hr <sup>5</sup>                                  | 33                                                         | %           | ISO 815            |
| <b>Aging</b>                                              | <b>Nominal Value</b>                                       | <b>Unit</b> | <b>Test Method</b> |
| Change in Tensile Strength in Air (110°C, 1000 hr)        | -1.0                                                       | %           | ISO 188            |
| Change in Tensile Strain at Break in Air (110°C, 1000 hr) | -10                                                        | %           | ISO 188            |
| <b>Thermal</b>                                            | <b>Nominal Value</b>                                       | <b>Unit</b> | <b>Test Method</b> |
| Brittleness Temperature                                   |                                                            |             |                    |
| --                                                        | -53.0                                                      | °C          | ASTM D746          |
| Type B                                                    | -53.0                                                      | °C          | ISO 812            |
| <b>Flammability</b>                                       | <b>Nominal Value</b>                                       | <b>Unit</b> | <b>Test Method</b> |
| Burning Rate                                              | 19                                                         | mm/min      | ISO 3795           |
| Fogging - Dry Fog                                         | 86                                                         | %           | SAE J1756          |
| Color Fastness                                            |                                                            |             |                    |
| to Burnt Gas, AATCC Rating : 60°C <sup>6</sup>            | > 4.00                                                     |             |                    |
| to Burnt Gas, Change in Color : 60°C <sup>7</sup>         | Delta E < 3                                                |             |                    |
| to Burnt Gas, Yellowness Index : 60°C <sup>8</sup>        | < 2.00                                                     | YI          |                    |
| to Light <sup>9</sup>                                     | Delta E < 3                                                |             |                    |
| Odor Rating <sup>10</sup>                                 | > 7.00                                                     |             |                    |
| Ozone Resistance (40°C) <sup>11</sup>                     | 0 Rating                                                   |             | ISO 1431-1         |
| Weatherability                                            |                                                            |             |                    |
| Arizona <sup>12</sup>                                     | Delta E < 3                                                |             |                    |
| Florida <sup>13</sup>                                     | Delta E < 3                                                |             | SAE J1976          |
| <b>NOTE</b>                                               |                                                            |             |                    |
| 1.                                                        | Type 1, 500 mm/min                                         |             |                    |
| 2.                                                        | Type 1, 500 mm/min                                         |             |                    |
| 3.                                                        | Type 1, 500 mm/min                                         |             |                    |
| 4.                                                        | Method Ba, Angle (Unnicked), 500 mm/min                    |             |                    |
| 5.                                                        | Type A                                                     |             |                    |
| 6.                                                        | ISO 105-G02, AATCC TM 23, 168 h                            |             |                    |
| 7.                                                        | ISO 105-G02, AATCC TM 23, 168 h                            |             |                    |
| 8.                                                        | ISO 105-G02, AATCC TM 23, 168 h                            |             |                    |
| 9.                                                        | SAE J2412, ISO 105-B06, Cond. 5, 1,240.8 kJ/m <sup>2</sup> |             |                    |
| 10.                                                       | GMW3205 Code B                                             |             |                    |
| 11.                                                       | 100 pphm, Method A                                         |             |                    |
| 12.                                                       | 105,000 TNR Langley's exposure per GMW3417 L1, F2, G1, T5  |             |                    |
| 13.                                                       | 2 years exposure, Procedure A                              |             |                    |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

