

## Product Data Sheet

TREXPENE® A64NU

PP/EPDM Based Vulcanized TPR

**Product Description:** TREXPENE® A64NU is a heat stabilized PP/EPDM based Thermoplastic Vulcanized Elastomer (TPV). This Natural compound is intended primarily for underhood applications such as mats, seals, gaskets, air ducts, CVJ boots, covers, grommets or other parts where softness and conformity are needed. This material can be processed using Injection Molding, Extrusion, Blow Molding or other melt processing techniques.

| Property                                     | Test Method                       | Unit                                                                          | Typical Values        |
|----------------------------------------------|-----------------------------------|-------------------------------------------------------------------------------|-----------------------|
| Hardness                                     | ISO 868                           | Shore A (15 second delay)                                                     | 64±4                  |
| Density                                      | ISO 1183                          | g/cm <sup>3</sup>                                                             | 0.95±0.02             |
| Tensile Stress at Break                      | ISO 37, Type 1, 500mm/min         | MPa<br>⊥<br>//                                                                | 5.7<br>4.5            |
| Tensile Stress at 100%,                      | ISO 37, Type 1, 500mm/min         | MPa<br>⊥<br>//                                                                | 2.3<br>3.9            |
| Ultimate Elongation                          | ISO 37, Type 1, 500mm/min         | %<br>⊥<br>//                                                                  | 720<br>250            |
| Tear Strength                                | ISO 34-1, Method B, 500 mm/min    | N/mm<br>⊥<br>//                                                               | 27.4<br>23.8          |
| Compression Set at 125°C/70hrs<br>70°C/22hrs | ASTM D395-B, ISO 815-A            | %                                                                             | 41.4<br>26.3          |
| Brittle Temperature                          | ASTM D746, ISO 812B               | °C                                                                            | -52                   |
| Long Term Heat Aging Performance             | 1000 h @ 110°C followed by ISO 37 | % Retention Tensile<br>% Retention Elongation                                 | 82.7<br>87.2          |
| Short Term Heat Aging Performance            | 168 h @ 150°C followed by ISO 37  | % Tensile Change<br>% Elongation Change<br>% Tensile @ 100% Elongation Change | -7.5<br>-5.4<br>+11.4 |



|                             |                                                        |                                                                                                                                     |                                    |
|-----------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Fluid Resistance            | ISO 1817, 70<br>125°C/70hrs immersed<br>in RM903 fluid | % Tensile change<br>% Elongation<br>change<br>% Tensile @ 100%<br>Elongation change<br>% Volume change<br>% Tear Strength<br>change | -47<br>-64<br><br>-8<br>106<br>-55 |
| Ozone Resistance            | ISO 1431-1, "A"<br>100pphm, 40°C                       | Rating                                                                                                                              | 0                                  |
| Flammability / Burn<br>rate | FMVSS 302, GMW3232<br>ISO 3795                         | mm/min                                                                                                                              | 20.0                               |

