

## Technical Data Sheet

### *Petrothene* NA951000



Low Density Polyethylene

#### Product Description

*Petrothene* NA951000 is a low density homopolymer resin selected by customers for use in industrial and consumer packaging as well as liner and bag applications. NA951000 has an excellent balance of processability, toughness and drawdown and does not contain slip or antiblock.

|                          |                                                                                                                                                                                                                                                                                          |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | Agriculture Film; Bags & Pouches; Bottles and Vials; Bottles For Consumer Goods; Bottles for Industrial Use; Can Liners; Caps & Closures; Clear Containers; Film Wrap; Food Packaging Film; Lamination Film; Liner Film; Opaque Containers; Secondary Packaging; Surface Protection Film |
| <b>Market</b>            | Flexible Packaging; Rigid Packaging                                                                                                                                                                                                                                                      |
| <b>Processing Method</b> | Blown Film; Cast Film; Extrusion Blow Molding                                                                                                                                                                                                                                            |

| Typical Properties               | Nominal Value | English Units     | Nominal Value | SI Units          | Test Method |
|----------------------------------|---------------|-------------------|---------------|-------------------|-------------|
| <b>Physical</b>                  |               |                   |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg) | 2.2           | g/10 min          | 2.2           | g/10 min          | ASTM D1238  |
| Base Resin Density, (23 °C)      | 0.920         | g/cm <sup>3</sup> | 0.920         | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Mechanical</b>                |               |                   |               |                   |             |
| Tensile Strength                 | 1970          | psi               | 13.6          | MPa               | ASTM D638   |
| Tensile Elongation at Break      | 600           | %                 | 600           | %                 | ASTM D638   |
| <b>Film</b>                      |               |                   |               |                   |             |
| Dart Drop Impact Strength, F50   | 100           | g                 | 100           | g                 | ASTM D1709  |
| Tensile Strength at Break        |               |                   |               |                   |             |
| MD                               | 3600          | psi               | 24.8          | MPa               | ASTM D882   |
| TD                               | 2500          | psi               | 17.2          | MPa               | ASTM D882   |
| Tensile Elongation at Break      |               |                   |               |                   |             |
| MD                               | 250           | %                 | 250           | %                 | ASTM D882   |
| TD                               | 520           | %                 | 520           | %                 | ASTM D882   |
| 1% Secant Modulus                |               |                   |               |                   |             |
| MD                               | 28500         | psi               | 197           | MPa               | ASTM D882   |
| TD                               | 33000         | psi               | 228           | MPa               | ASTM D882   |
| Elmendorf Tear Strength          |               |                   |               |                   |             |
| MD                               | 320           | g                 | 320           | g                 | ASTM D1922  |
| TD                               | 100           | g                 | 100           | g                 | ASTM D1922  |
| <b>Thermal</b>                   |               |                   |               |                   |             |
| Vicat Softening Temperature      | 194           | °F                | 90            | °C                | ASTM D1525  |
| <b>Additive</b>                  |               |                   |               |                   |             |
| Slip                             | None          |                   | None          |                   | LYB Method  |
| Antiblock                        | None          |                   | None          |                   | LYB Method  |