

## Technical Data Sheet

### *Petrothene* GA635962

Linear Low Density Polyethylene

#### Product Description

*Petrothene* GA635962 is a high flow hexene LLDPE resin selected by customers for the rotational molding of large hollow objects, including toys, playground equipment, drums and agricultural and chemical storage containers. GA635962 exhibits high ESCR, low temperature impact strength and warp resistance. GA635962 is UV-stabilized and available in a 35-mesh powder as *Microthene* MP635962.

**Application** Containers; Drums; Sports, Leisure & Toys

**Market** Outdoor Equipment; Rigid Packaging

**Processing Method** Rotomolding

| Typical Properties                                                               | Nominal Value | English Units     | Nominal Value | SI Units          | Test Method |
|----------------------------------------------------------------------------------|---------------|-------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                                                  |               |                   |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg)                                                 | 6.7           | g/10 min          | 6.7           | g/10 min          | ASTM D1238  |
| Density, (23 °C)                                                                 | 0.935         | g/cm <sup>3</sup> | 0.935         | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Mechanical</b>                                                                |               |                   |               |                   |             |
| Flexural Modulus                                                                 |               |                   |               |                   |             |
| (1% Secant)                                                                      | 107000        | psi               | 740           | MPa               | ASTM D790   |
| (2% Secant)                                                                      | 91000         | psi               | 625           | MPa               | ASTM D790   |
| Tensile Strength at Yield                                                        | 2700          | psi               | 18.6          | MPa               | ASTM D638   |
| Environmental Stress Crack Resistance, F <sub>50</sub><br>(100% Igepal®, Cond A) | >1000         | hr                | >1000         | hr                | ASTM D1693  |
| <b>Impact</b>                                                                    |               |                   |               |                   |             |
| Low Temperature Impact                                                           |               |                   |               |                   |             |
| 1/8" specimen @ -40 °F                                                           | 51            | ft-lbs            | 69            | J                 | ARM         |
| 1/4" specimen @ -40 °F                                                           | 145           | ft-lbs            | 195           | J                 | ARM         |
| <b>Thermal</b>                                                                   |               |                   |               |                   |             |
| Deflection Temperature Under Load                                                |               |                   |               |                   |             |
| (66 psi, Unannealed)                                                             | 135           | °F                | 57            | °C                | ASTM D648   |
| (264 psi, Unannealed)                                                            | 102           | °F                | 39            | °C                | ASTM D648   |