

## Technical Data Sheet

### *Icorene* 3940-BK204 BLACK EL



Polyethylene, Linear Medium Density

#### Product Description

*Icorene* 3940 is a linear medium density polyethylene developed for rotational molding applications. The resin is fully UV stabilized and suitable for general purpose applications. It has a good balance of properties such as toughness and stiffness.

|                          |                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------|
| <b>Processing Method</b> | Rotomolding                                                                           |
| <b>Attribute</b>         | Ablation Resistant; Good Processability; Good Stiffness; Good Toughness; UV Resistant |
| <b>Forms</b>             | Pellets; Powder                                                                       |
| <b>Appearance</b>        | Black; Colors Available; Natural Color                                                |
| <b>Additive</b>          | UV Stabilizer                                                                         |
| <b>Application</b>       | Containers; General Purpose; Outdoor Applications; Pallets; Tanks                     |

| Typical Properties                                     | Nominal Value  | Units             | Test Method |
|--------------------------------------------------------|----------------|-------------------|-------------|
| <b>Physical</b>                                        |                |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg)                       | 3.4 to 4.0     | g/10 min          | ASTM D1238  |
| Density                                                | 0.939 to 0.941 | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Mechanical</b>                                      |                |                   |             |
| Tensile Strength at Yield, (50 mm/min)                 | 20.0           | MPa               | ASTM D638   |
| Environmental Stress Crack Resistance                  |                |                   |             |
| (10% Igepal)                                           | 50.0           | hr                | ASTM D1693  |
| (100% Igepal)                                          | >1000          | hr                | ASTM D1693  |
| Flexural Modulus, (1.3 mm/min)                         | 834            | MPa               | ASTM D790   |
| <b>Impact</b>                                          |                |                   |             |
| Impact Strength                                        |                |                   |             |
| (-40 °C, 3.18 mm, Rotational Molded)                   | 77             | J                 | ARM         |
| (-40 °C, 6.35 mm, Rotational Molded)                   | >258           | J                 | ARM         |
| <b>Thermal</b>                                         |                |                   |             |
| Deflection Temperature Under Load Unannealed (264 psi) | 40.6           | °C                | ASTM D648   |
| Deflection Temperature Under Load Unannealed (66 psi)  | 62             | °C                | ASTM D648   |