Technical Data Sheet

# *Icorene* 1613 DW NAT

Polyethylene, Linear Medium Density

## Product Description

*Icorene* 1613 DW NAT is a hexene linear medium density polyethylene specifically developed for use in rotational moulding. This grade is designed for applications requiring good processability, stiffness and toughness. The constituents of this product are suitable for food contact applications.

| | |
|---|---|
| **Processing Method** | Rotomolding |
| **Attribute** | Good Impact Resistance; Good Processability; Good Stiffness; Good Toughness; Hexene Comonomer; UV Resistant |
| **Forms** | Powder |
| **Appearance** | Natural Color |
| **Additive** | UV Stabilizer |
| **Application** | Tanks |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---|---|---|
| **Physical** | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 4.5 | g/10 min | ISO 1133 |
| Density, (23 °C) | 0.938 | g/cm³ | ISO 1183 |
| **Mechanical** | | | |
| Tensile Strength at Yield, (23 °C, 3.20 mm, Rotational Molded) | 20.0 | MPa | ISO 527-1 |
| Environmental Stress Crack Resistance | | | |
| (Condition B, F50, 10% Igepal, 50 °C) | >250 | hr | ASTM D1693 |
| (Condition B, F50, 100% Igepal, 50 °C) | >1000 | hr | ASTM D1693 |
| Flexural Modulus, (23 °C) | 750 | MPa | ISO 178 |
| Tensile Elongation at Break, (Rotational Molded) | >1000 | % | ISO 527-1 |
| **Impact** | | | |
| Drop Impact Resistance, (-20 °C, Internal Method) | >200 | J/cm | ASTM D4226 |
| **Hardness** | | | |
| Shore Hardness, (Shore D) | 62 | | ISO 868 |
| **Thermal** | | | |
| Vicat Softening Temperature, (A (10N)) | 117 | °C | ISO 306 |
| Deflection Temperature Under Load Unannealed (0.45 MPa) | 65 | °C | ISO 75-2/B |
| Melting Temperature | 127 | °C | ISO 11357-3 |