

Technical Data Sheet

Icorene 3940-3452G TSI Black



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.

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

| Typical Properties | Nominal Value | Units | Test Method |
|--|----------------|-------------------|-------------|
| Physical | | | |
| 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 ³ | ASTM D1505 |
| Mechanical | | | |
| 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 |
| Impact | | | |
| Impact Strength | | | |
| (-40 °C, 3.18 mm, Rotational Molded) | 77 | J | ARM |
| (-40 °C, 6.35 mm, Rotational Molded) | >258 | J | ARM |
| Thermal | | | |
| Deflection Temperature Under Load Unannealed (264 psi) | 40.6 | °C | ASTM D648 |
| Deflection Temperature Under Load Unannealed (66 psi) | 62 | °C | ASTM D648 |