

Technical Data Sheet

Icorene 3940 GRY 7474

High Density Polyethylene

Product Description

Icorene 3940 is a high density polyethylene specifically developed for rotational moulding. This grade is suitable for use in general purpose applications. It has a good balance of properties such as toughness and stiffness.

| | |
|--------------------------|---|
| Processing Method | Rotomolding |
| Attribute | Good Processability; Good Stiffness; Good Toughness; UV Resistant |
| Forms | Powder |
| Appearance | Natural Color; Unspecified Color |
| Additive | UV Stabilizer |
| Application | Containers; General Purpose; Tanks |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 4.0 | g/10 min | ASTM D1238 |
| Density | 0.939 | g/cm ³ | ASTM D1505 |
| Mechanical | | | |
| Tensile Strength at Yield, (50 mm/min, 23 °C, 3.20 mm) | 19.0 | MPa | ISO 527-1 |
| Tensile Strength at Break, (50 mm/min, 23 °C, 3.20 mm) | 20.0 | MPa | ISO 527-1 |
| Environmental Stress Crack Resistance, (100% Igepal, 50 °C) | >1000 | hr | ASTM D1693 |
| Flexural Modulus | 730 | MPa | ISO 178 |
| Tensile Elongation at Break, (50 mm/min, 23 °C, 3.20 mm) | >280 | % | ISO 527-1 |
| Impact | | | |
| Drop Impact Resistance, (-20 °C, Internal Method) | 170 | J/cm | ASTM D4226 |
| Hardness | | | |
| Durometer Hardness, (Shore D) | 60 | | ISO 868 |
| Thermal | | | |
| Vicat Softening Temperature, (A (10N)) | 118 | °C | ISO 306 |
| Melting Temperature | 128 | °C | DSC |

Notes

These are typical property values not to be construed as specification limits.

Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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