

## Technical Data Sheet

### *Icorene* 1380 GRY 7474

High Density Polyethylene



#### Product Description

*Icorene* 1380 is a hexene high density polyethylene specifically developed for use in rotational moulding. This grade has been designed for applications requiring good stiffness and toughness and can be used in many different rotomoulding, including food contact applications. *Icorene* 1380 Black 9001 is TUV ECE R34 approved, protocolnr: 185XS0206-00.

#### Regulatory Status

For regulatory compliance information, see *Icorene* 1380 GRY 7474 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

|                   |                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Status            | Commercial: Active                                                                                                                           |
| Availability      | Europe                                                                                                                                       |
| Processing Method | Rotomolding                                                                                                                                  |
| Attribute         | Good Impact Resistance; Good Stiffness; Good Toughness; Hexene Comonomer; High ESCR (Environmental Stress Cracking Resistance); UV Resistant |
| Forms             | Granules; Powder                                                                                                                             |
| Appearance        | Natural Color; Unspecified Color                                                                                                             |
| Additive          | UV Stabilizer                                                                                                                                |
| Application       | Fuel Tanks; Septic Tanks; Tanks; Tanks, Industrial                                                                                           |

| Typical Properties                                          | Nominal Value | Units             | Test Method |
|-------------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                             |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg)                            | 4.5           | g/10 min          | ASTM D1238  |
| Density                                                     | 0.94          | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Mechanical</b>                                           |               |                   |             |
| Tensile Strength at Yield, (50 mm/min, 23 °C)               | 20.0          | MPa               | ISO 527-1   |
| Environmental Stress Crack Resistance, (100% Igepal, 50 °C) | >1000         | hr                | ASTM D1693  |
| Flexural Modulus, (23 °C)                                   | 800           | MPa               | ASTM D790   |
| Tensile Elongation at Break, (50 mm/min, 23 °C)             | >1000         | %                 | ISO 527-1   |
| <b>Impact</b>                                               |               |                   |             |
| Drop Impact Resistance, (-20 °C, Internal Method)           | >200          | J/cm              | ASTM D4226  |
| <b>Thermal</b>                                              |               |                   |             |
| Melting Temperature                                         | 127           | °C                | ISO 11357-3 |

## 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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