

## Technical Data Sheet

### *Icorene* 3590 GRY 7441



Linear Low Density Polyethylene

#### Product Description

*Icorene* 3590 is a linear low density polyethylene specifically developed for rotational moulding. This grade is a very fast processing material suitable for use in many different applications. It has a good balance of properties such as toughness, easy flow and stiffness.

#### Regulatory Status

For regulatory compliance information, see *Icorene* 3590 GRY 7441 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

|                   |                                                                                                |
|-------------------|------------------------------------------------------------------------------------------------|
| Status            | Commercial: Active                                                                             |
| Availability      | Europe                                                                                         |
| Processing Method | Rotomolding                                                                                    |
| Attribute         | Good Flow; Good Moldability; Good Processability; Good Stiffness; Good Toughness; UV Resistant |
| Forms             | Powder                                                                                         |
| Appearance        | Natural Color; Unspecified Color                                                               |
| Additive          | UV Stabilizer                                                                                  |
| Application       | General Purpose                                                                                |

| Typical Properties                                                            | Nominal Value | Units             | Test Method |
|-------------------------------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                                               |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg)                                              | 9.0           | g/10 min          | ASTM D1238  |
| Density                                                                       | 0.935         | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Mechanical</b>                                                             |               |                   |             |
| Tensile Strength at Yield                                                     | 17.0          | MPa               | ISO 527     |
| Tensile Strength at Break                                                     | 16.0          | MPa               | ISO 527     |
| Environmental Stress Crack Resistance, (Condition B, F50, 100% Igepal, 50 °C) | >150          | hr                | ASTM D1693  |
| Flexural Modulus                                                              | 550           | MPa               | ISO 178     |
| <b>Impact</b>                                                                 |               |                   |             |
| Drop Impact Resistance, (-20 °C, Internal Method)                             | 160           | J/cm              | ASTM D4226  |
| <b>Hardness</b>                                                               |               |                   |             |
| Durometer Hardness, (Shore D)                                                 | 53            |                   | ISO 868     |
| <b>Thermal</b>                                                                |               |                   |             |
| Vicat Softening Temperature, (A (10N))                                        | 113           | °C                | ISO 306     |
| Melting Temperature                                                           | 126           | °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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