

## Technical Data Sheet

***Icorene* 1314 BUE 5747**

High Density Polyethylene

**Product Description**

*Icorene* 1314 is a high performance hexene high density polyethylene specifically developed for use in rotational moulding. This grade has been designed for applications requiring good stiffness and toughness. This material can be used in many different rotomoulding applications and for food contact applications. *Icorene* 1314 Black 9001 is TÜV approved, protocolnr 175XS0122-00. *Icorene* 1314 Natural and Black are DiBt approved Z40-25-519 and WRAS approved: 1507503 & 1202543

|                          |  |
|--------------------------|--|
| <b>Processing Method</b> | Rotomolding  |
| <b>Attribute</b>         | Good Impact Resistance; Good Stiffness; Good Toughness; Hexene Comonomer; High ESCR (Environmental Stress Cracking Resistance); UV Resistant |
| <b>Forms</b>             | Powder   |
| <b>Appearance</b>        | Black; Natural Color; Unspecified Color  |
| <b>Additive</b>          | UV Stabilizer  |
| <b>Application</b>       | 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)                        | 3.0           | g/10 min          | ASTM D1238  |
| Density   | 0.939         | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Mechanical</b>                                       |               |                   |             |
| Tensile Strength at Yield, (23 °C, Type I)              | 20.0          | MPa               | ISO 527     |
| Environmental Stress Crack Resistance                   |               |                   |             |
| (Condition B, F50, 10% Igepal, 50 °C)                   | >300          | hr                | ASTM D1693  |
| (Condition B, F50, 100% Igepal, 50 °C)                  | >1000         | hr                | ASTM D1693  |
| Flexural Modulus, (23 °C)                               | 800           | MPa               | ISO 178     |
| Tensile Elongation at Break, (23 °C)                    | >1000         | %                 | ISO 527     |
| <b>Impact</b>   |               |                   |             |
| Drop Impact Resistance                                  |               |                   |             |
| (-40 °C, Rotomoulding)                                  | >210          | J/cm              | ARM         |
| (-20 °C, Rotomoulding, Internal Method)                 | >200          | J/cm              | ASTM D4226  |
| <b>Hardness</b>   |               |                   |             |
| Durometer Hardness, (Shore D)                           | 62            |                   | ASTM D2240  |
| <b>Thermal</b>  |               |                   |             |
| Vicat Softening Temperature, (A (10N))                  | 117           | °C                | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa) | 67            | °C                | ISO 75-2/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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