**Technical Data Sheet**

# *Icorene* 1613 BK85

Linear Medium Density Polyethylene
LyondellBasell Industries
Rotomolding

| Product Description |
|---|

ICORENE® 1613 BK85 is a hexene linear medium density polyethylene specifically developed for use in rotational moulding.

This grade is designed for applications requiring good processability, stiffness and toughness. This product is particularly suitable for the production of diesel fuel tanks.
ICORENE® 1613 BK85 is TUV ECE R34 approved, protocolnr: 175XS0121-00.
ICORENE® 1613 BK85 is WRAS approved:1810500.

| General | | | |
|---|---|---|---|
| Additive | • UV Stabilizer | | |
| Features | • Good Impact Resistance<br>• Good Processability | • Good Stiffness<br>• Good Toughness | • Hexene Comonomer<br>• UV Resistant |
| Uses | • Fuel Tanks | | |
| Appearance | • Black | | |
| Forms | • Powder | | |
| Processing Method | • Rotational Molding | | |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Density | 0.938 g/cm³ | 0.938 g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (190°c/2.16 Kg) | 4.5 g/10 min | 4.5 g/10 min | ISO 1133 |
| Environmental Stress-Cracking Resistance (ESCR) | | | ASTM D1693 |
| 122°f (50°c), 100% Igepal | > 1000 hr | > 1000 hr | |
| **Mechanical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Tensile Strength | | | ISO 527-1 |
| Yield, 73°f (23°c), Rotational Molded | 2900 psi | 20.0 MPa | |
| Tensile Elongation | | | ISO 527-1 |
| Break, 73°f (23°c), Rotational Molded | > 600 % | > 600 % | |
| Flexural Modulus | | | ISO 178 |
| 73°f (23°c), Rotational Molded | 109000 psi | 750 MPa | |
| **Impact** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Drop Impact Resistance | | | |
| -40°f (-40°c) | > 4.72 in·lb/mil | > 210 J/cm | ARM |
| -4°f (-20°c) [1] | > 4.50 in·lb/mil | > 200 J/cm | Internal Method |
| **Hardness** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Durometer Hardness (Shore D) | 62 | 62 | ISO 868 |
| **Thermal** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Deflection Temperature Under Load | | | ISO 75-2/B |
| 66 Psi (0.45 Mpa), Unannealed | 149 °F | 65.0 °C | |
| Vicat Softening Temperature | 243 °F | 117 °C | ISO 306/A |
| Melting Temperature | 261 °F | 127 °C | ISO 11357-3 |

### Notes

[1] Based on ISO 6603

### Notes

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