# Technical Data Sheet

## *Petrothene* LR734002

High Density Polyethylene

### Product Description

*Petrothene* LR734002 is a high density polyethylene resin that exhibits good stiffness and environmental stress crack resistance. Typical applications include bottles for household chemicals, food products, and personal care products.

### Regulatory Status

For regulatory compliance information, see *Petrothene* LR734002 Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

| | |
|---|---|
| **Status** | Commercial: Active |
| **Availability** | North America |
| **Application** | Bottles For Consumer Goods |
| **Market** | Rigid Packaging |
| **Processing Method** | Extrusion Blow Molding |
| **Attribute** | Excellent Processability |

| Typical Properties | Nominal Value | English Units | Nominal Value | SI Units | Test Method |
|---|---|---|---|---|---|
| **Physical** | | | | | |
| Melt Flow Rate, (190 °C/2.16 kg) | 0.38 | g/10 min | 0.38 | g/10 min | ASTM D1238 |
| Density, (23 °C) | 0.953 | g/cm³ | 0.953 | g/cm³ | ASTM D1505 |
| **Mechanical** | | | | | |
| Flexural Modulus, (1% Secant) | 176000 | psi | 1210 | MPa | ASTM D790 |
| Tensile Strength at Yield | 4000 | psi | 27.6 | MPa | ASTM D638 |
| Tensile Elongation at Break | >500 | % | >500 | % | ASTM D638 |
| Environmental Stress Crack Resistance, $F_{50}$ (100% Igepal®, Cond B) | 25 | hr | 25 | hr | ASTM D1693 |
| **Impact** | | | | | |
| Tensile Impact Strength | 131 | ft-lb/in² | 275 | kJ/m² | ASTM D1822 |
| **Hardness** | | | | | |
| Shore Hardness, (Shore D) | 67 | | 67 | | ASTM D2240 |
| **Thermal** | | | | | |
| Vicat Softening Temperature | 261 | °F | 127 | °C | ASTM D1525 |
| Low Temperature Brittleness, $F_{50}$ | <-105 | °F | <-76 | °C | ASTM D746 |
| Deflection Temperature Under Load, (66 psi, Unannealed) | 167 | °F | 75 | °C | ASTM D648 |



Manufacturer website: https://www.lyondellbasell.com/en/

## Notes

Igepal® is a registered trademark of Rhodia.

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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