

## **Technical Data Sheet**

# Petrothene LH735000

High Density Polyethylene



## **Product Description**

*Petrothene* LH735000 exhibits good stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents and household chemicals.

**Application** Bottles For Consumer Goods; Bottles for Industrial Use

Market Rigid Packaging

Processing Method Extrusion Blow Molding
Attribute Good Processability

| Typical Properties  | Nominal<br>Value | English<br>Units | Nominal<br>Value | SI<br>Units | Test Method |
|---|------------------|------------------|------------------|-------------|-------------|
| Physical  |                  |                  |                  |             |             |
| Melt Flow Rate, (190 °C/2.16 kg)                                  | 0.35             | g/10 min         | 0.35             | g/10 min    | ASTM D1238  |
| Density, (23 °C)  | 0.953            | g/cm³            | 0.953            | g/cm³       | ASTM D1505  |
| Mechanical  |                  |                  |                  |             |             |
| Flexural Modulus, (1% Secant)                                     | 180000           | psi              | 1240             | MPa         | ASTM D790   |
| Tensile Strength at Yield   | 3900             | psi              | 26.9             | MPa         | ASTM D638   |
| Tensile Elongation at Break                                       | >500             | %                | >500             | %           | ASTM D638   |
| Environmental Stress Crack Resistance, F₅₀ (100% Igepal®, Cond B) | 25               | hr               | 25               | hr          | ASTM D1693  |
| Impact  |                  |                  |                  |             |             |
| Tensile Impact Strength   | 120              | ft-lb/in²        | 252              | kJ/m²       | ASTM D1822  |
| Hardness  |                  |                  |                  |             |             |
| Shore Hardness, (Shore D)   | 66               |                  | 66               |             | ASTM D2240  |
| Thermal   |                  |                  |                  |             |             |
| Vicat Softening Temperature                                       | 262              | °F               | 128              | °C          | ASTM D1525  |
| Low Temperature Brittleness, F <sub>50</sub>                      | <-105            | °F               | <-76             | °C          | ASTM D746   |
| Deflection Temperature Under Load, (66 psi, Unannealed)           | 165              | °F               | 74               | °C          | ASTM D648   |

#### **Notes**

Igepal® is a registered trademark of Rhodia.

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

This is a generic prime product which means that this product has wider specifications than standard prime grades. The product may be sourced from various manufacturing locations which utilize different catalyst systems and undergo unique process conditions

## **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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