

## Petrothene

# LR734045

High Density Polyethylene

Blow Molding Grade

Melt Index 0.38 Density 0.953

## Applications

Petrothene LR734045 is a high density polyethylene resin that exhibits good stiffness and environmental stress crack resistance. This product contains stearate as a core rod release for the injection-blow molding process. Typical applications include bottles for household chemicals.

## Regulatory Status

LR734045 meets the requirements of the Food and Drug Administration regulation 21 CFR 177.1520. This regulation allows the use of this olefin polymer in "...articles or components of articles intended for use in contact with food..." Specific limitations or conditions of use may apply. Contact your Equistar sales representative for more information about the use of specific products for specific applications.

## Processing Techniques

Specific recommendations for processing LR734045 can only be made when the processing conditions, equipment and end use are known. For further suggestions, please contact your Equistar sales representative.

## Typical Properties

| Property   | Nominal Value | Units     | ASTM Test Method    |
|--|---------------|-----------|---------------------|
| Melt Index   | 0.38          | g/10 min  | D 1238              |
| Density  | 0.953         | g/cc      | D 1505              |
| Tensile Strength @ Yield                               | 4,000         | psi       | D 638               |
| Elongation @ Break                                     | >500          | %         | D 638               |
| Flexural Modulus                                       | 176,000       | psi       | D 790               |
| Tensile Impact   | 131           | ft-lb/in. | D 1822              |
| Low Temperature Brittleness, F <sub>50</sub>           | <-76          | °C        | D 746               |
| Heat Deflection Temperature @ 66 psi                   | 75            | °C        | D 648               |
| Vicat Softening Point                                  | 127           | °C        | D 1525              |
| Hardness, Shore D                                      | 67            |           | D 2240              |
| Environmental Stress Crack Resistance, F <sub>50</sub> | 25            | hrs       | D 1693 <sup>1</sup> |
|  | >500          | hrs       | D 2561              |

<sup>1</sup> 100% Igepal® CO-630, 50°C

<sup>®</sup> Igepal is a registered trademark of Rhône-Poulenc Co., Inc.

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