

Alathon

# L5040

High Density Polyethylene  
Blow Molding / Extrusion Grade

Melt Index 0.40 Density 0.949

## Applications

Alathon L5040 is able to incorporate high levels of post consumer recycle and retain excellent bottle physical properties. This resin provides high ESCR and processing stability. Typical applications include stress crack resistant bottles and extruded pipe and conduit. L5040 containing antistat is available as L5040AS

## Regulatory Status

L5040 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.

## Processing Techniques

Specific recommendations for processing L5040 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 Method  | Nominal Value | Units     | ASTM Test           |
|--|---------------|-----------|---------------------|
| Melt Index   | 0.40          | g/10 min  | D 1238              |
| Density  | 0.949         | g/cc      | D 1505              |
| Tensile Strength @ Yield                               | 3,400         | psi       | D 638               |
| Elongation @ Break                                     | >600          | %         | D 638               |
| Flexural Modulus                                       | 160,000       | psi       | D 790               |
| Tensile Impact   | 188           | ft-lb/in. | D 1822              |
| Low Temperature Brittleness, F <sub>50</sub>           | <-75          | °C        | D 746               |
| Heat Deflection Temperature @ 66 psi                   | 76            | °C        | D 648               |
| Vicat Softening Point                                  | 128           | °C        | D 1525              |
| Hardness, Shore D                                      | 63            |           | D 2240              |
| Environmental Stress Crack Resistance, F <sub>50</sub> | >1,000        | hrs       | D 1693 <sup>1</sup> |

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

® Igepal is a registered trademark of Rhône-Poulenc Co., Inc.

The information on this document is, to our knowledge, true and accurate. However, since the particular uses and the actual conditions of use of our products are beyond our control, establishing satisfactory performance of our products for the intended application is the customer's sole responsibility. All uses of Equistar products and any written or oral information, suggestions or technical advice from Equistar are without warranty, express or implied, and are not an inducement to use any process or product in conflict with any patent.

Equistar materials are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. Equistar makes no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues or fluids.

More detailed safety and disposal information on our products is contained in the Material Safety Data Sheet (MSDS). All users of our products are urged to retain and use the MSDS. A MSDS is automatically distributed upon purchase/order execution. You may request an advance or replacement copy by calling our MSDS Hotline at 800.700.0946.

Alathon is a registered trademark of Equistar Chemicals, LP.

Lyondell Chemical Company  
1221 McKinney, Suite 700  
P.O. Box 2583  
Houston, Texas 77252-2583  
800.615.8999  
<http://www.lyondell.com>