## LyondellBasell Alathon® L5040 High Density Polyethylene, Blow Molding/Extrusion Grade

Category : Polymer , Renewable/Recycled Polymer , Thermoplastic , Polyethylene (PE) , HDPE , High Density Polyethylene (HDPE), Blow Molding Grade

## Material Notes:

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. Regulatory Status: L5040 containing antistat is available as L5040AS 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. 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. This product is from the former Equistar product line.

## Order this product through the following link:

http://www.lookpolymers.com/polymer\_LyondellBasell-Alathon-L5040-High-Density-Polyethylene-Blow-MoldingExtrusion-Grade.php

| Physical Properties | Metric                  | English             | Comments                                |
|---------------------|-------------------------|---------------------|---|
| Density             | 0.949 g/cc              | 0.0343 lb/in³       | ASTM D1505                              |
| ESCR 100% Igepal®   | >= 1000 hour            | >= 1000 hour        | F <sub>50</sub> ; CO-630; ASTM<br>D1693 |
|                     | @Temperature 50.0<br>°C | @Temperature 122 °F |   |
| Melt Flow           | 0.40 g/10 min           | 0.40 g/10 min       | ASTM D1238                              |

| Mechanical Properties   | Metric   | English      | Comments   |
|-------------------------|----------|--------------|------------|
| Hardness, Shore D       | 63       | 63           | ASTM D2240 |
| Tensile Strength, Yield | 23.4 MPa | 3400 psi     | ASTM D638  |
| Elongation at Break     | >= 600 % | >= 600 %     | ASTM D638  |
| Flexural Modulus        | 1.10 GPa | 160 ksi      | ASTM D790  |
| Tensile Impact          | 100 J/cm | 188 ft-lb/in | ASTM D1822 |

| Thermal Properties                             | Metric      | English    | Comments                    |
|--|-------------|------------|-----------------------------|
| Deflection Temperature at 0.46 MPa<br>(66 psi) | 76.0 °C     | 169 °F     | ASTM D648                   |
| Vicat Softening Point                          | 128 °C      | 262 °F     | ASTM D1525                  |
| Brittleness Temperature                        | <= -75.0 °C | <= -103 °F | F <sub>50</sub> ; ASTM D746 |



## Contact Songhan Plastic Technology Co.,Ltd.

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