

Alathon

L5040

High Density Polyethylene

Blow Molding 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 product safety 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.

Typical Properties

| Property | Nominal Value | Units | ASTM Test Method |
|--|---------------|-------------------|--------------------|
| Melt Index | 0.40 | g/10 min | D1238 |
| Density | 0.949 | g/cm ³ | D1505 |
| Tensile Strength @ Yield | 3,400 | psi | D638 |
| Elongation @ Break | >600 | % | D638 |
| Flexural Modulus | 160,000 | psi | D790 |
| Tensile Impact | 188 | ft-lb/in. | D1822 |
| Low Temperature Brittleness, F ₅₀ | <-75 | °C | D746 |
| Heat Deflection Temperature @ 66 psi | 76 | °C | D648 |
| Vicat Softening Point | 128 | °C | D1525 |
| Hardness, Shore D | 63 | | D2240 |
| Environmental Stress Crack Resistance, F ₅₀ | >1000 | hrs | D1693 ¹ |

¹ 100% Igepal® CO-630, 50°C

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