

Petrothene

LT523501

High Density Polyethylene

Blow Molding Grade

Melt Index: 0.35 Density: 0.952



Applications

Petrothene LT523501 exhibits an enhanced balance of stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents, household chemicals, foodstuffs and pharmaceuticals.

Regulatory Status

Petrothene LT523501 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

While specific recommendations for processing LT523501 can only be made when the processing conditions, equipment and end use are known, typical stock temperatures range from 340 to 410°F.

Typical Properties

| Property | Nominal Value | Units | ASTM Test Method |
|--|---------------|----------|--------------------|
| Melt Index | 0.35 | g/10 min | D1238 |
| Density | 0.952 | g/cc | D1505 |
| Tensile Strength @ Yield | 3,900 | psi | D638 |
| Tensile Strength @ Break | 2,830 | psi | D638 |
| Elongation @ Break | 1,100 | % | D638 |
| Flexural Modulus (1% Secant) | 174,200 | psi | D790 |
| Low Temperature Brittleness, F ₅₀ | <-76 | °C | D746 |
| Heat Deflection Temperature @ 66 psi | 67 | °C | D648 |
| Vicat Softening Point | 124 | °C | D1525 |
| Hardness, Shore D | 68 | | D2240 |
| Environmental Stress Crack Resistance, F ₅₀ | 140 | 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.