



Luban LL-8446.21 Linear Low Density Polyethylene

Description

Luban LL-8446.21 is a LLDPE butene copolymer designed to offer excellent processability, whiteness, and fast grinding rate. This Long-term UV-8 stabilized resin is ideally suited for applications that require excellent dimensional control and low warpage.

Application

Consumer articles, toys, roto-molded tanks, trash containers, chemical shipping drums, water park slides

Properties (Typical Values)

| Property | Unit | Test method | Value* |
|--|--------------------|-----------------|--------|
| Melt Index (190°C/2.16 kg) | g/10 min | ISO 1133 | 5 |
| Density | g /cm ³ | ISO 1183 | 0.936 |
| Environmental Stress-Cracking Resistance 122°F (50°C), 100% Igepal, F50 | hr | ASTM D1693A | 36 |
| Environmental Stress-Cracking Resistance 122°F (50°C), 10% Igepal, F50 | hr | ASTM D1693A | 24 |
| Flexural Modulus – 1% Secant | MPa | ASTM D790B | 730 |
| Flexural Modulus | MPa | ISO 178 | 700 |
| Tensile stress at yield | MPa | ISO 527-2/1A/50 | 17 |
| Tensile strain at yield | % | ISO 527-2/50 | 14 |
| Deflection Temperature Under Load 0.45 MPa, Unannealed | °C | ASTM D648 | 52 |
| Melting Temperature | °C | ASTM D3418 | 125 |

*Testing of all physical properties were done on 3 mm Roto-molded samples. ESCR testing done on compression molded samples.

Note: These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.



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Storage and Handling

Luban LL-8446.21 must be protected from direct sunlight and should be stored in a shaded and completely dry area. During handling and processing, the material should be kept in a well-ventilated area to prevent the accumulation of dust and fumes. Contact with strong oxidizers, excessive heat, sparks or open flame should be avoided as this could initiate the degradation process and consequently impact the quality of the material.

Safety

Luban LL-8446.21 is not classified as dangerous preparation. For further information about safety in handling and processing please refer to the Safety Data Sheet.

Food Contact

Luban LL-8446.21 meets the requirements of the U.S. Food and Drug Administration (FDA) as specified in 21 CFR 177.1520, covering safe use of polyolefin articles and components of articles intended for direct food contact. For additional information on approved conditions of use for food contact applications, please refer to the "Product Stewardship Declaration".

Recycling

The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.

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Disclaimer:

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