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PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

Marlex® K307

MEDIUM DENSITY POLYETHYLENE

This medium density, high molecular weight hexene copolymer is tailored for geomembrane applications that require:

- Outstanding ESCR
- Broad fusion range
- Excellent melt strength
- Good processability

This resin meets these specifications:

- ASTM D4976 - PE 225
- GRI-GM13 except carbon black requirements
- FDA 21 CFR 177.1520(c) 3.1a, use conditions C through G per 21 CFR 176.170(c). Volume of food contacting article must be equal to or greater than 5 gallons.

Typical geomembrane applications for K307 include:

- Landfill liners
- Gasoline and chemical tank containment liners
- Tunnel moisture barriers
- Mine tailing collection projects

| NOMINAL PHYSICAL PROPERTIES ⁽¹⁾ | English | SI | Method |
|---|---------------------------|-------------------------|-----------------------|
| Density | --- | 0.937 g/cm ³ | ASTM D1505 |
| Flow Rate (HLMI, 190/21.6) | --- | 21.0 g/10 min | ASTM D1238 |
| Tensile Strength at Yield, 2 in/min, Type IV bar | 2,900 psi | 20 MPa | ASTM D638 |
| Elongation at Break, 2 in/min, Type IV bar | 800% | 800% | ASTM D638 |
| Flexural Modulus, Tangent - 16:1 span:depth, 0.5 in/min | 120,000 psi | 830 MPa | ASTM D790 |
| ESCR, Condition B (10% Igepal), F ⁵⁰ | >1,500 h | >1,500 h | ASTM D1693 |
| ESCR, Condition C (100% Igepal), F ⁵⁰ | >1,500 h | >1,500 h | ASTM D1693 |
| SP-NCTL | >900 h | >900 h | ASTM D5397 (Appendix) |
| Durometer Hardness, Type D (Shore D) | 57 | 57 | ASTM D2240 |
| Vicat Softening Temperature, Loading 1, Rate A | 221°F | 105°C | ASTM D1525 |
| Heat Deflection Temperature, 66 psi, Method A | 137°F | 58°C | ASTM D648 |
| Brittleness Temperature, Type A, Type I specimen | <-103°F | <-75°C | ASTM D746 |
| Tensile Impact, Type S bar | 190 ft•lb/in ² | 400 kJ/m ² | ASTM D1822 |

1. The nominal properties reported herein are typical of the product, but do not reflect normal testing variance and therefore should not be used for specification purposes. Values are rounded. The physical properties were determined on compression molded specimens that were prepared in accordance with Procedure C of ASTM D4703, Annex A1.

MSDS #240370

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Another quality product from



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