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PREMIUM EXTRUSION AND RIGID PACKAGING RESINS

## Marlex® 9503HF Polyethylene

HIGH DENSITY POLYETHYLENE (HDPE)

This gas phase, high molecular weight, ethylene-hexene copolymer with synthetic antistatic agent is tailored for lightweight blow molded containers that require:

- Outstanding ESCR
- Excellent impact resistance
- Durability

This resin meets these specifications:

- ASTM D4976 - PE 235
- FDA 21 CFR 177.1520(c) 3.2a, use conditions B through H per Table 2 of 21 CFR 176.170(c)

Typical blow molded applications for 9503HF include:

- Detergent bottles
- Industrial containers and large parts
- Household and industrial chemical containers

| NOMINAL PHYSICAL PROPERTIES <sup>(1)</sup>                      | English     | SI                      | Method     |
|-----------------------------------------------------------------|-------------|-------------------------|------------|
| <b>Density</b>                                                  | ---         | 0.946 g/cm <sup>3</sup> | ASTM D1505 |
| <b>Flow Rate</b> (MI, 190 °C/2.16 kg)                           | ---         | 0.31 g/10 min           | ASTM D1238 |
| <b>Tensile Strength at Yield</b> , 2 in/min, Type IV bar        | 3,600 psi   | 24 MPa                  | ASTM D638  |
| <b>Elongation at Break</b> , 2 in/min, Type IV bar              | 500 %       | 500 %                   | ASTM D638  |
| <b>Flexural Modulus</b> , Tangent - 16:1 span:depth, 0.5 in/min | 150,000 psi | 1,030 MPa               | ASTM D790  |
| <b>ESCR</b> , Condition B (100 % Igepal), F <sub>50</sub>       | > 800 h     | > 800 h                 | ASTM D1693 |
| <b>Brittleness Temperature</b> , Type A, Type I specimen        | < -103 °F   | < -75 °C                | ASTM D746  |

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.

