

# HDPE 5502

High Density Polyethylene

This high molecular weight hexene copolymer is tailored for light blow moulded containers that require:

- Excellent stiffness
- Exceptional processability

This resin meets these specifications:

- ASTM D4976 – PE 235
- FDA 21 CFR 177.1520(c) 3.2a
- Listed in the Drug Master File
- EU No. 10/2011

Typical blow moulded applications for HHM 5502BN include:

- Household chemicals
- Industrial chemicals
- Pharmaceuticals
- Toolboxes
- Furniture

| Nominal Resin Properties <sup>(1,2)</sup>                       | Value (SI Units)        | Method     |
|---|-------------------------|------------|
| <b>Density</b>  | 0.955 g/cm <sup>3</sup> | ASTM D1505 |
| <b>Melt Index</b> , Condition 190°C / 2.16 kg                   | 0.35 g/10 min           | ASTM D1238 |
| <b>Tensile Strength at Yield</b> , 50.8 mm/min, Type IV bar     | 27 MPa                  | ASTM D638  |
| <b>Elongation at Break</b> , 50.8 mm/min, Type IV bar           | 600%                    | ASTM D638  |
| <b>Flexural Modulus</b> , Tangent, 16:1 span:depth, 12.7 mm/min | 1370 MPa                | ASTM D790  |
| <b>ESCR</b> , Condition B (100% Igepal), F <sub>50</sub>        | 35 hrs                  | ASTM D1693 |
| <b>Durometer Hardness</b> , Type D (Shore D)                    | 63                      | ASTM D2240 |
| <b>Heat Deflection Temperature</b> @ 0.46 MPa                   | 79°C                    | ASTM D648  |
| <b>Brittleness Temperature</b> , Type A, Type I specimen        | <-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.
2. The physical properties were determined on compression moulded specimens that were prepared in accordance with Procedure C of ASTM D4703, Annex A1.
3. Not Determined – Awaiting laboratory updates.

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