

# HIVOREX 8301B

High Density Polyethylene  
Lotte Chemical Corporation

## Technical Data

### Product Description

Excellent impact resistance at low temperature, Excellent ESCR,  
High molecular weight HDPE

### General

|                           |                                                                |                                                                |                                    |
|---------------------------|----------------------------------------------------------------|----------------------------------------------------------------|------------------------------------|
| Material Status           | • Commercial: Active                                           |                                                                |                                    |
| Literature <sup>1</sup>   | • <a href="#">Technical Datasheet (English)</a>                |                                                                |                                    |
| Search for UL Yellow Card | • <a href="#">Lotte Chemical Corporation</a>                   |                                                                |                                    |
| Availability              | • Asia Pacific<br>• Asia Pacific                               | • Europe<br>• Europe                                           | • North America<br>• North America |
| Features                  | • Good Impact Resistance<br>• High ESCR (Stress Crack Resist.) | • High Molecular Weight<br>• Low Temperature Impact Resistance |                                    |
| Uses                      | • Bottles<br>• Fuel Tanks                                      | • Industrial Applications<br>• Tanks                           |                                    |
| RoHS Compliance           | • RoHS Compliant                                               |                                                                |                                    |

| Physical                                        | Nominal Value Unit      | Test Method |
|-------------------------------------------------|-------------------------|-------------|
| Density                                         | 0.950 g/cm <sup>3</sup> | ASTM D1505  |
| Melt Mass-Flow Rate (MFR)                       |                         | ASTM D1238  |
| 190°C/2.16 kg                                   | 0.040 g/10 min          |             |
| 190°C/21.6 kg                                   | 5.0 g/10 min            |             |
| Environmental Stress-Cracking Resistance<br>F50 | > 1000 hr               | ASTM D1693  |

| Mechanical                 | Nominal Value Unit | Test Method |
|----------------------------|--------------------|-------------|
| Tensile Strength (Yield)   | 22.6 MPa           | ASTM D638   |
| Tensile Elongation (Break) | > 800 %            | ASTM D638   |
| Flexural Modulus           | 883 MPa            | ASTM D790   |

| Impact                     | Nominal Value Unit | Test Method |
|----------------------------|--------------------|-------------|
| Notched Izod Impact (23°C) | No Break           | ASTM D256   |

| Thermal                     | Nominal Value Unit | Test Method |
|-----------------------------|--------------------|-------------|
| Brittleness Temperature     | < -80.0 °C         | ASTM D746   |
| Vicat Softening Temperature | 122 °C             | ASTM D1525  |

### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.