

## Technical Data Sheet

### *Petrothene* LT523522



High Density Polyethylene

#### Product Description

*Petrothene* LT523522 exhibits an enhanced balance of stiffness and environmental stress crack resistance. Typical applications include bottles for bleach, detergents, household chemicals, foodstuffs and pharmaceuticals. This product is formulated with synthetic antistat.

|                          |   |
|--------------------------|---|
| <b>Application</b>       | Bottles For Consumer Goods; Bottles for Industrial Use                  |
| <b>Market</b>            | Rigid Packaging   |
| <b>Processing Method</b> | Extrusion Blow Molding  |
| <b>Attribute</b>         | Contains Antistat; Good ESCR (Environmental Stress Cracking Resistance) |

| Typical Properties                                      | Nominal Value | English Units     | Nominal Value | SI Units          | Test Method |
|---|---------------|-------------------|---------------|-------------------|-------------|
| <b>Physical</b>   |               |                   |               |                   |             |
| Melt Flow Rate, (190 °C/2.16 kg)                        | 0.35          | g/10 min          | 0.35          | g/10 min          | ASTM D1238  |
| Density, (23 °C)  | 0.952         | g/cm <sup>3</sup> | 0.952         | g/cm <sup>3</sup> | ASTM D1505  |
| <b>Mechanical</b>                                       |               |                   |               |                   |             |
| Flexural Modulus, (1% Secant)                           | 174200        | psi               | 1200          | MPa               | ASTM D790   |
| Tensile Strength at Break                               | 2830          | psi               | 19.5          | MPa               | ASTM D638   |
| Tensile Strength at Yield                               | 3900          | psi               | 26.9          | MPa               | ASTM D638   |
| Tensile Elongation at Break                             | 1100          | %                 | 1100          | %                 | ASTM D638   |
| Environmental Stress Crack Resistance, F <sub>50</sub>  | 140           | hr                | 140           | hr                | ASTM D1693  |
| <b>Hardness</b>   |               |                   |               |                   |             |
| Shore Hardness, (Shore D)                               | 68            |                   | 68            |                   | ASTM D2240  |
| <b>Thermal</b>  |               |                   |               |                   |             |
| Vicat Softening Point                                   | 255           | °F                | 124           | °C                | ASTM D1525  |
| Low Temperature Brittleness, F <sub>50</sub>            | <-105         | °F                | <-76          | °C                | ASTM D746   |
| Deflection Temperature Under Load, (66 psi, Unannealed) | 153           | °F                | 67            | °C                | ASTM D648   |

## Notes

ESCR performed using 100% Igepal® CO-630, 50°C, where; Igepal® is a registered trademark of Rhodia.

These are typical property values not to be construed as specification limits.

## Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

## Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

© LyondellBasell Industries Holdings, B.V. 2018

## Disclaimer

Information in this document is accurate to the best of our knowledge at the date of publication. The document is designed to provide users general information for safe handling, use, processing, storage, transportation, disposal and release and does not constitute any warranty or quality specification, either express or implied, including any warranty of merchantability or fitness for any particular purpose. Users shall determine whether the product is suitable for their use and can be used safely and legally.

In addition to any prohibitions of use specifically noted in this document, LyondellBasell may further prohibit or restrict the sale of its products into certain applications. For further information, please contact a LyondellBasell representative.

## Trademarks

The Trademark referenced within the product name is owned or used by the LyondellBasell family of companies.