

# Hostalen GD 4755

High Density Polyethylene

LyondellBasell Industries

## Technical Data

### Product Description

Exceptional organoleptic properties and a good balance of stiffness, toughness and environmental stress cracking resistance make Hostalen GD4755 the choice of customers for the production of closures for sparkling water, CSD and many other types of food and non-food caps and closures. Customers also use this material for engineering parts.

This grade is not intended for use in medical or pharmaceutical applications.

### General

|                           |                                                                                                                                                                                                                                                   |                                                      |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Material Status           | • Commercial: Active                                                                                                                                                                                                                              |                                                      |
| Literature <sup>1</sup>   | • <a href="#">Processing - Mold Shrink (English)</a><br>• <a href="#">Processing - PE Films (English)</a><br>• <a href="#">Processing - Polyolefin Injection Molding Guide (English)</a><br>• <a href="#">Technical Datasheet - ISO (English)</a> |                                                      |
| Search for UL Yellow Card | • <a href="#">LyondellBasell Industries</a><br>• <a href="#">Hostalen</a>                                                                                                                                                                         |                                                      |
| Availability              | • Africa & Middle East                                                                                                                                                                                                                            | • Europe                                             |
| Features                  | • Good Organoleptic Properties<br>• Good Toughness                                                                                                                                                                                                | • High Density<br>• High ESCR (Stress Crack Resist.) |
| Uses                      | • Caps                                                                                                                                                                                                                                            | • Closures                                           |
| Processing Method         | • Compression Molding                                                                                                                                                                                                                             | • Injection Molding                                  |

| Physical                  | Nominal Value Unit      | Test Method     |
|---------------------------|-------------------------|-----------------|
| Density                   | 0.953 g/cm <sup>3</sup> | ISO 1183        |
| Melt Mass-Flow Rate (MFR) |                         | ISO 1133        |
| 190°C/2.16 kg             | 1.9 g/10 min            |                 |
| 190°C/5.0 kg              | 6.0 g/10 min            |                 |
| FNCT <sup>3</sup> (50°C)  | 8.0 hr                  | Internal Method |

| Mechanical             | Nominal Value Unit | Test Method |
|------------------------|--------------------|-------------|
| Tensile Modulus        | 1100 MPa           | ISO 527-2   |
| Tensile Stress (Yield) | 27.0 MPa           | ISO 527-2   |
| Tensile Strain (Yield) | 10 %               | ISO 527-2   |

| Impact                         | Nominal Value Unit    | Test Method |
|--------------------------------|-----------------------|-------------|
| Charpy Notched Impact Strength |                       | ISO 179/1eA |
| -30°C                          | 4.5 kJ/m <sup>2</sup> |             |
| 23°C                           | 6.0 kJ/m <sup>2</sup> |             |

| Hardness                             | Nominal Value Unit | Test Method |
|--------------------------------------|--------------------|-------------|
| Shore Hardness (Shore D)             | 62                 | ISO 868     |
| Ball Indentation Hardness (H 132/30) | 51.0 MPa           | ISO 2039-1  |

| Thermal                     | Nominal Value Unit | Test Method |
|-----------------------------|--------------------|-------------|
| Vicat Softening Temperature | 75.0 °C            | ISO 306/B50 |

| Injection              | Nominal Value Unit |
|------------------------|--------------------|
| Processing (Melt) Temp | 190 to 230 °C      |

### 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.

<sup>3</sup> 6MPa, 2% Arkopal