

## Technical Data Sheet

### *Hostalen* 5231H UV



High Density Polyethylene

#### Product Description

Outstanding balance of stiffness, toughness and environmental stress cracking resistance make *Hostalen* 5231H UV the choice of customers for the production of closures for water, CSD and many other typers of food and non-food caps and closures.

*Hostalen* 5231H UV is formulated with an additive package used by customers for an optimised combination of organoleptic properties and opening torque.

This grade is not intended for medical and pharmaceutical applications.

|                          |                                                                                                                     |
|--------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | Caps & Closures                                                                                                     |
| <b>Market</b>            | Consumer Products; Rigid Packaging                                                                                  |
| <b>Processing Method</b> | Compression Molding; Injection Molding                                                                              |
| <b>Attribute</b>         | Good Organoleptic Properties; Good Toughness; High Density; High ESCR<br>(Environmental Stress Cracking Resistance) |

| Typical Properties                      | Nominal Value | Units             | Test Method   |
|-----------------------------------------|---------------|-------------------|---------------|
| <b>Physical</b>                         |               |                   |               |
| Melt Flow Rate                          |               |                   |               |
| (190 °C/2.16 kg)                        | 2.0           | g/10 min          | ISO 1133-1    |
| (190 °C/5.0 kg)                         | 5.6           | g/10 min          | ISO 1133-1    |
| Density                                 | 0.952         | g/cm <sup>3</sup> | ISO 1183-1    |
| <b>Mechanical</b>                       |               |                   |               |
| Tensile Modulus                         | 1100          | MPa               | ISO 527-1, -2 |
| Tensile Stress at Yield                 | 25            | MPa               | ISO 527-1, -2 |
| Tensile Strain at Yield                 | 10            | %                 | ISO 527-1, -2 |
| FNCT, (6.0 MPa, 6.6% Dehyton PL, 50 °C) | 13            | hr                | ISO 16770     |
| <b>Impact</b>                           |               |                   |               |
| Charpy Impact Strength - Notched        |               |                   |               |
| (23 °C)                                 | 10.4          | kJ/m <sup>2</sup> | ISO 179       |
| (-30 °C)                                | 5.3           | kJ/m <sup>2</sup> | ISO 179       |
| <b>Hardness</b>                         |               |                   |               |
| Shore Hardness, (Shore D)               | 70            |                   | ISO 868       |
| Ball Indentation Hardness               | 50            | MPa               | ISO 2039-1    |
| <b>Thermal</b>                          |               |                   |               |
| Vicat Softening Temperature, (B50)      | 74            | °C                | ISO 306       |