# PRODUCT DATA SHEET

## HD5822

### HIGH-DENSITY POLYETHYLENE

## Product Description

HD5822 is a high-density polyethylene (HDPE) grade which possesses a very good combination of high stiffness and high stress cracking resistance. It contains standard stabilization additive package with antioxidants. This grade is suitable for small blow molding applications.

## Characteristics

- Broad molecular weight distribution
- Good organoleptic properties
- High environmental stress cracking resistance (ESCR)
- High rigidity

## Applications

- Consumer products e.g. thin- wall packaging, toys, bottles
- Rigid packaging e.g. jerry cans
- Industrial packaging

## Properties

| Typical Properties | Test Method | Units | Typical Value |
|---|---|---|---|
| **Physical** | | | |
| Melt Flow Rate @ 5 kg | ISO 1133 | g/10min | 1.2 |
| Melt Flow Rate @ 21.6 kg | ISO 1133 | g/10min | 22 |
| Density | ISO 1183 | $g/cm^3$ | 0.958 |
| **Mechanical** | | | |
| Tensile Stress @ Yield | ISO 527-2 | MPa | 28 |
| Tensile Strain @ Yield | ISO 527-2 | % | 7 |
| Tensile modulus | ISO 527-2 | MPa | 1350 |
| Tensile impact strength - Notched (-30 °C) | ISO 8256 | $kJ/m^2$ | 75 |
| Charpy Impact Strength - Notched (-30 °C, Type 1, Edgewise, Notch A) | ISO 179 | $kJ/m^2$ | 6.5 |
| Environmental Stress Crack Resistance, F50 (Cond. B, 10% Arkopal N100) | ASTM D1693 | hour(s) | 150 |
| FNCT (3.5 MPa, 2% Arkopal N100, 80 °C) | ISO 16770 | hour(s) | 8 |
| Shore Hardness | ISO 868 | | 64 |
| Ball Indentation Hardness | ISO 2039-1 | MPa | 60 |

*Note: The above are typical data representing the product; not to be construed as analysis certificate or specifications. User should confirm results by their own tests.*

## Typical Processing Conditions

HD5822 can be processed on most standard extrusion equipment designed for HDPE. Optimization may be required depending on the exact end use requirement. Melt temperature in the range of 180-220°C are typically used.

## Regulatory Information

Details of information will be provided in a relevant declaration letter upon request.

## Processing and Handling

HD5822 should be stored in a dry, under shaded and ventilated environment at a temperature below 40°C. Prolong of improper storage can result in deterioration of product properties.

## Health and Safety

This product is not classified as a dangerous preparation. Before using this product, customer is advised to consult PRefChem's Safety Data Sheet (SDS) to understand the precautions in various aspect of safety, recovery and disposal of the product.

## For More Information

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