

# PRODUCT DATA SHEET



## HD5511

### HIGH-DENSITY POLYETHYLENE

#### Product Description

HD5511 is a high-density polyethylene (HDPE) grade typically used in general injection molding applications. It contains standard stabilization additive package. This grade demonstrates high environmental stress crack resistance (ESCR), good impact resistance, flowability and low warpage.

#### Characteristics

- Good flow
- Good processability
- High density
- High impact resistance & rigidity
- Low warpage

#### Applications

- All-purpose injection moulding e.g. caps & closures, rigid packaging, crates, housewares, toys, sports equipment

#### Properties

Typical Properties	Test Method	Units	Typical Value
<b>Physical</b>			
Melt Flow Rate @ 2.16 kg	ISO 1133	g/10min	3.6
Melt Flow Rate @ 5.0 kg	ISO 1133	g/10min	11
Density	ISO 1183	g/cm <sup>3</sup>	0.955
<b>Mechanical</b>			
Tensile Modulus	ISO 527-2	MPa	1200
Tensile Stress at Yield	ISO 527-2	MPa	27
Tensile Strain at Yield	ISO 527-2	%	8
FNCT (6.0 MPa, 2% Arkopal N100, 50 °C)	ISO 16770	hour(s)	4.5
Charpy Impact Strength - Notched			
23 °C, Type 1, Edgewise, Notch A	ISO 179	kJ/m <sup>2</sup>	4.0
-30 °C, Type 1, Edgewise, Notch A	ISO 179	kJ/m <sup>2</sup>	4.5
Shore Hardness (Shore D)	ISO 868		60
Ball Indentation Hardness	ISO 2039-1	MPa	52
<b>Thermal</b>			
Vicat Softening Temperature	ISO 306	°C	73

*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

HD5511 can be processed on most standard film conversion equipment designed for HDPE. Optimization may be required depending on the exact end use requirement. Melt temperature in the range of 180–250°C are typically used.

## Regulatory Information

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

## Processing and Handling

HD5511 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

Please contact:

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