

# PRODUCT DATA SHEET



## HD5223

### HIGH-DENSITY POLYETHYLENE

#### Product Description

HD5223 is a high-density polyethylene (HDPE) grade which possesses a very good combination of high stress cracking resistance, stiffness and good chemical resistance. It contains standard stabilization additive package with antioxidants. This grade is suitable for small blow molding applications.

#### Characteristics

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

#### Applications

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

#### Properties

Typical Properties	Test Method	Units	Typical Value
<b>Physical</b>			
Melt Flow Rate @ 5 kg	ISO 1133	g/10min	1.2
Melt Flow Rate @ 21.6 kg	ISO 1133	g/10min	23
Density	ISO 1183	g/cm <sup>3</sup>	0.952
<b>Mechanical</b>			
Tensile Stress @ Yield	ISO 527-2	MPa	25
Tensile Strain @ Yield	ISO 527-2	%	8
Tensile modulus	ISO 527-2	MPa	1100
Tensile impact strength - Notched, (-30 °C)	ISO 8256	kJ/m <sup>2</sup>	75
Charpy Impact Strength - Notched, (-30 °C, Type 1, Edgewise, Notch A)	ISO 179	kJ/m <sup>2</sup>	6
Environmental Stress Crack Resistance, F50 (Cond. B, 10% Arkopal N100)	ASTM D1693	hour(s)	1200
FNCT (3.5 MPa, 2% Arkopal N100, 80 °C)	ISO 16770	hour(s)	30
Shore Hardness	ISO 868		62
Ball Indentation Hardness	ISO 2039-1	MPa	51

*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

HD5223 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

HD5223 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:

**Pengerang Petrochemical Company Sdn. Bhd.** (201501003532 (1128864-H))

First Floor, Administration Block A2, Pengerang Integrated Complex Management Office (PICMO), 81600 Pengerang, Johor. Website: [www.prefchem.com](http://www.prefchem.com)

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