



## Natural HDPE - Key Technical Properties

Form: Extruded sheet • Material standard: DIN EN ISO 17855-1

Property	Typical Value	Test Method / Notes
Density	0.957 g/cm <sup>3</sup>	DIN EN ISO 1183
Tensile modulus (Et)	1,250 MPa	DIN EN ISO 527
Yield stress	28 MPa	DIN EN ISO 527
Elongation at yield	9 %	DIN EN ISO 527
Impact strength (Charpy, unnotched)	No break	DIN EN ISO 179-1eU
Notched impact strength (Charpy)	30 kJ/m <sup>2</sup>	DIN EN ISO 179
Shore hardness D (15 s)	64	DIN EN ISO 868
Mean coefficient of linear thermal expansion	$1.8 \times 10^{-4} \text{ K}^{-1}$	ISO 11359-2
Thermal conductivity	0.38 W/m·K	DIN EN 12667
Service temperature (typ.)	−50 to +80 °C	Guidance range
Food contact compliance	EU 10/2011: Yes FDA: Yes	Stated compliance
Fire behaviour	DIN 4102, Class B2	Supplier self-assessment (no certificate)
Surface resistivity	$\geq 10^{14} \Omega$	DIN IEC 60093

## **Application Notes**

HDPE offers excellent chemical resistance, low moisture absorption and very good impact toughness. Typical uses include cutting boards, linings, wear strips, trays, and general engineering components.

## **Standards & Material**

Extruded to moulding compound standard: DIN EN ISO 17855-1. Property data are typical values for extruded sheet unless otherwise noted.

## **Important Notes & Disclaimers**

- Typical values measured on extruded sheets (~4 mm). Values may vary with thickness and processing.
- Pressed sheets are typically tested at ~20 mm thickness. For backed sheets, data refer to the non-backed base sheet.
- Information presented is for engineering guidance only and does not constitute a guaranteed specification.
- Suitability must be verified by the processor or end-user for the specific application.
- Data may not be applicable to other product forms (e.g. pipes, solid rods) or products that have undergone downstream processing.

Warlond Plastics • [warlondplastics.com.au](http://warlondplastics.com.au) • [sales@warlondplastics.com.au](mailto:sales@warlondplastics.com.au) • © Warlond Plastics. All rights reserved.