

TECHNICAL DATA SHEET
HD T10

HD T10 is a HDPE yarn / monofilament grade produced by Spherilene Technology

This grade can be used in yarns / monofilament for Fabrics, Nets, Twines & Ropes

HD T10 is characterized by excellent processability and mechanical strength

BIS Designation Code: IS 7328-3B-LBO-EDA

Property	Test Method	Unit	Nominal Value
Melt Flow Index (2.16 kg, 190°C)	ASTM D1238, IS 13360 (Part 4/Sec 1)	g/10 min	1.1
Melt Flow Index (5 kg, 190°C)			3
Melt Flow Index (21.6 kg, 190°C)	ASTM D1238	g/10 min	27
Density (23°C)	ASTM D1505, IS 13360 (Part 3/Sec 11)	g/cm ³	0.950

Physical Property

Tensile Strength at Yield	ASTM D638 (50 mm/min)	MPa	26
Tensile Strength at Break		MPa	38
Elongation at Yield		%	11
Elongation at Break		%	1100
Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	400
Flexural Modulus	ASTM D790A	MPa	1000
Vicat Softening Point (10N)	ASTM D1525	°C	127
DSC Melting Temperature	ASTM D3418	°C	133
Hardness	ASTM D2240	Shore D	61

Suggested Processing Conditions

Barrel Temperature	200 – 240 °C
Die Temperature	230 – 250 °C
Quench Temperature	30 °C
Stretching Temperature	95 – 120 °C

* Halene H is the registered trademark of High Density Polyethylene of Haldia Petrochemicals Limited

Mechanical Properties are on specimens from Compression Molded sheet prepared in accordance with ASTM D4703

This grade meets the requirements of:

IS 7328:2020 Specification for Polyethylene Material for Moulding and Extrusion

IS 16738:2018 Positive List of Constituents for Polypropylene, Polyethylene and their Copolymers for its Safe Use in Contact with Foodstuffs and Pharmaceuticals

IS 10146 for use in contact with foodstuffs, pharmaceuticals and drinking water

This product is not recommended for manufacturing of Single Use Plastic (SUP) items listed under Plastics Waste Management (PWM) Rule 2016 and its latest amendment

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