

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 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 sheets



Halene – H*

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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