

TECHNICAL DATA SHEET

M5018L

M5018L is an Injection Molding HDPE produced by Spherilene Technology

M5018L is recommended for general purpose Injection Molding

M5018L combines excellent processability with good mechanical properties

BIS Designation Code: IS 7328-3B-MB-EDE

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	20
Melt Flow Index (5 kg, 190°C)			50
Melt Flow Index (21.6 kg, 190°C)	ASTM D1238	g/10 min	450
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	22
Elongation at yield		%	10
Elongation at Break		%	450
Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	35
Flexural Modulus	ASTM D790A	MPa	800
Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	64
Vicat Softening Point (10 N)	ASTM D1525	°C	121
DSC Melting Temperature	ASTM D3418	°C	132
Hardness	ASTM D2240	Shore D	62
Suggested Processing Conditions			
Barrel Temperature	180 – 235 °C		
Nozzle Temperature	235 °C		

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

Mechanical Properties are on Injection Molded test Specimens

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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