

TECHNICAL DATA SHEET

B6401

B6401 is a HDPE Blow Molding Grade produced by Mitsui CX Process

B6401 combines exceptional processability with high rigidity, excellent mechanical properties and impact resistance

B6401 is recommended for upto 20 L containers for Lubricants and Edible oils

BIS Designation Code: IS 7328-3P-BB-GXDA

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	0.40
Melt Flow Index (5 kg, 190°C)		g/10 min	1.6
Melt Flow Index (21.6 kg, 190°C)		g/10 min	25
Density (23°C, Annealed)	ASTM D1505, IS 13360 (Part 3/Sec 11)	g/cm ³	0.960
Density (23°C, Annealed)	JIS MCI HZ-F-109	g/cm ³	0.963
Physical Property			
Tensile Strength at Yield	ASTM D638 (50 mm/min)	MPa	32
Elongation at Yield		%	9
Tensile Strength at Break		MPa	40
Elongation at Break		%	1000
Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	300
Flexural Modulus	ASTM D790A	MPa	1300
Hardness	ASTM D2240	Shore D	68
ESCR (F ₅₀ , 10% Igepal soln. v/v)	ASTM D1693B	Hr	< 20
Vicat Softening Point (10 N)	ASTM D1525	°C	129
Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	70
DSC Melting Temperature	ASTM D3418	°C	135

Suggested Processing Conditions	
Barrel Temperature	150/160/165/175 °C
Die Temperature	180 – 185 °C
Parison Temperature	185 – 190 °C
Cooling Water for Mold	20 – 25 °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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