HALDIA PETROCHEMICALS LTD

Halene – H*

TECHNICAL DATA SHEET P5200UV

P5200UV is a HDPE pipe grade produced by Mitsui CX Process

P5200UV combines excellent processability with good creep resistance, ESCR and mechanical properties

P5200UV is stabilized adequately with HALS^{+} to give a long service life under outdoor exposure & recommended for telecom ducts

BIS Designation Code: IS 7328-3B-PD-EXTA

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	0.20
Melt Flow Index (5 kg, 190°C)		g/10 min	0.90
Melt Flow Index (21.6 kg, 190°C)		g/10 min	20
Density (23°C, Annealed)	ASTM D1505, IS 13360 (Part 3/Sec 11)	g/cm^3	0.950
Density (23°C, Annealed)	JIS MCI HZ-F-109	g/cm^3	0.954
Density (27°C, Annealed)	IS 4984	g/cm^3	0.948
Physical Property			
Tensile Strength at Yield	ASTM D638 (50 mm/min)	MPa	25
Elongation at Yield		%	8
Tensile Strength at Break		MPa	38
Elongation at Break		%	900
Notched Izod Impact Strength (23°C)	ASTM D256A	J/m	175
Flexural Modulus	ASTM D790A	MPa	1000
Hardness	ASTM D2240	Shore D	65
ESCR (F_{50}, 10% Igepal soln. v/v)	ASTM D1693B	Hr	>1000
Vicat Softening Point (10 N)	ASTM D1525	°C	125
Heat Deflection Temperature (0.455 MPa)	ASTM D648	°C	64
DSC Melting Temperature	ASTM D3418	°C	131
Oxidative Induction Time	ASTM D3895	min	>30

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Suggested Processing Conditions	
Barrel Temperature	150 – 180 °C
Die Temperature	170 – 180 °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

[+] The total Hindered Amin Light Stabilizer (HALS) content is ~ 2000 ppm.

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.

The information and data presented herein are typical values of representative samples and should not be construed as specification or tested values of supplied product. Prior to use, buyer shall ensure independently through tests and trials, that HPL products can be handled and used by them legally, safely, and suitably for their intended operation and end-use application. No warranty or guarantee expressed or implied is made regarding performance or otherwise. In no event shall HPL be liable for any damage, loss or injury directly or indirectly suffered as a result of use of product or information provided herein. The information & data contained herein are reliable to the best of our knowledge on the date of release of the document and is subject to change without prior intimation based on research & development work undertaken by HPL

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