

TECHNICAL DATA SHEET

HDPE

HDPE sheets are a rigid material available in large sheet sizes and varying colours like black and white. It is ideal for general use in plant engineering, tank construction and waste water industry, where all round chemical resistance and weather ability are required.

I. Physical Properties	ASTM test	Unit i. e.	HDPE
1. Specific gravity	D792	g/cm ³	0,941-0.965
2. Specific volume	D792	in ³ /lb	29.4-28.7
3. Water absorption, 24h, 1/8-in thk	D570	%	<0.01
II. Mechanical Properties			
1. Tensile strength	D638	psi	3,100-5,500
2. Elongation	D638	%	20-1000
3. Tensile modulus	D638	10 ⁵ psi	0.6-1.8
4. Flexural modulus	D790	10 ⁵ psi	1.0-2.0
5. Impact strength, Izod	D256	ft-lb/in of notch	0.5-20
6. Hardness, Rockwell R	D785		65
III. Thermal Properties			
1. Thermal conductivity	C177	10 ⁴ cal-cm/sec-cm ² - °C	11.0-12.4
2. Coefficient of thermal expansion	D696	10 ⁵ in/in °F	6.1-7.2
3. Deflection temperature	D648	°F	
at 264 psi			110-130
at 66 psi			140-190
IV. Electrical Properties			
1. Dielectric strength, short time, 1/8-in thk	D149	V/mil	450-500
2. Dielectric constant at 1 kHz	D150		2.30-2.35
3. Dissipation factor at 1 kHz	D150		0.0003
4. Volume resistivity at 73°F, 50% RH	D257	Ω x cm	10 ¹⁵
V. Optical			
1. Refractive index	D542		1.54
2. Transmittance	D1003	%	10-50

Key Features:

- Weldable
- UV resistant
- Physiologically inert approved for food applications
- Electrical Insulations
- Chemical resistance

Application:

- Storage Vessels
- Waste Water Chemical Process Industry
- Cutting Boards
- Butchers preparations
- Tables
- Tanks



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