

HDPE Film/Sheet/Liner

Advantage of HDPE films:

> HDPE have high tear resistance, ozone, oxidation, weathering resistance, low coefficient of thermal expansion, flexibility, chemical resistance, proof resistance, low temperature resistance, friction resistance, high erosion resistance staining and migration resistance.



Covering of Food Grains

Physical Properties as per IS: 10889/84

SL. No.	Characteristics	Unit	Specification
1.	Tensile Strength	Kgf/cm ²	300 Min.
2	Elongation at Break	%	300 Min.
3	Carbon Black content	%	2.5 ± 0.5
4	Carbon Black dispersion	Dispersion analyzer	Satisfactory
5	Density	Gm/cc	0.950 ± 0.015
6	Tear Resistance	N	230 Min.
7	Punctual Resistance	N	450 Min.
8	Chemical Resistance 30% H ₂ SO ₄ for 7 days		
a	<input type="checkbox"/> T.S.	%	± 241
b	<input type="checkbox"/> E.B.	%	-25
9	Ozone Resistance	Visual	No Cracks
10	Water Absorption	%	0.05 Max.

HDPE Film/ Sheet/Liner

The management of solid waste is crumbled for both the development as well as developing countries. The use of landfill for waste management is still a predominant option worldwide. Mainly used for agriculture operations, construction work and related applications. HDPE films have many advantages, such as high shear and tensile strength, good barrier properties, high rigidity and high service temperature.

HDPE films mostly used in land fill application which protect the environment from the contamination produced by percolation of rainwater through the waste. A capping system will protect the landfill from further water infiltration.

Due to excellent chemical, physical, biological properties HDPE Sheets are used for ground water protection and water engineering including the sealing of waste disposal sites, industrial lagoons and reservoirs.



Covering for rainy season

Applications:

- > Landfill for waste dumping and hazardous waste dumping, chemical waste, fly ash, soda ash, thermal power plant, Hydro Power plant, waste liquid and steel plant.
- > Disposal of hazardous municipal waste in secured landfill guideline from the ministry of environment and forest.
- > Masking of concrete structure at port.
- > Storage of agricultural/industrial slurries
- > Chemical & Petrochemical industries
- > Salt Spans
- > Air pollution and ground water pollution
- > Fire fighting lagoons
- > Lining canals & rivers
- > Dams, Reservoir.

LDPE Film/Sheet/Liner



Water reservoirs



Canal Lining

Technical Specification of LDPE Film as per IS: 2508/87

SL. No.	Characteristics	Unit	Specification
1.	Tensile Strength	Kgf/cm ²	140 Min.
2.	Elongation at Break	%	200 Min.
3.	Dart Impact Load	Gf	120 Min. (Normal)
4.	Carbon Black content	%	2.5 ± 0.5
5.	Carbon Black dispersion	Dispersion analyzer	No Crack
6.	Density	Gm/cc	0.922 to 0.937
7.	Tear Resistance	N/mm ²	9.5 Min.



LDPE Film/Sheet/Liner

Low density polyethylene sheet are extensively used for protection of liquid contamination, agriculture, industry, infrastructural projects. LDPE film acts as a perfect line to prevent foreign material entering ground water sources as well as prevent seepage loss in water conservation projects.

The conveyance of irrigation water in canal system often give way to water seepage and ultimately lead to loss of irrigation water.

Other Application:

- > Agricultural purpose.
- > Lining of canal, reservoir, ponds.
- > Lining of Industrial Effluent plant.
- > Tunnels
- > Packaging, Wrapping
- > Water proofing for terrace garden.
- > For protection of food grains, fertilizers, cotton, chemicals, cement, constructions and power plant.
- > Concrete road and bridge.
- > Steel plant.



Ponds



Canal Lining

Properties of LDPE:

- > Maruti LDPE film has excellent mechanical properties
- > Saves water seepage upto 60% of total quantity of water available
- > It has a very low moisture/vapor transmission rate.
- > Very good resistance against chemical and unaffected by bacterial or fungus growth.
- > LDPE films have a very good resistance against ozone, oxidation, weather & water because polyethylene has a long chain of hydrocarbon which gives above properties.