

HDPE GEOMEMBRANE

PROPERTIES

- Highly resistance against chemicals.
- UV resistant.
- Higher tensile strength.
- Low permeability.
- Profoundly resistant to the fractures and cracks.
- Superior protection against leakages.
- Resistant against natural condition.
- Highly resistant to organic and inorganic solvents.
- It is easily applied to any kind of ground.
- Optionally it can be reinforced geotextiles.
- Recycled and can be used again.

USAGE AREAS

- Landfills
- Drainage pits for collecting leakage of gold or other mines
- Waste water repository
- Irrigation canals
- Mining sites
- Treatment plants
- Oilfields
- Fertilizer pits
- Sedimentation ponds
- Bioenergy generation plants
- When demanded, they can also be used in building foundation, tunnel and other waterproofing applications

APPLICATION AND USED EQUIPMENT

All of our waterproofing products are in the form of sheet or roll and they are applied as loose laid method. It is spread by leaving 6-10 cm overlapping portions and joined together by the help of fusion welding machine. Apart from the smooth areas (edges and the zones where welding machines can not be used), hot air guns are used. Besides those tools, extrusion welding machines are also used during the application process of polyethylene products. Welding rods and belts made of polyethylene are used with that machine in order to weld surrounding of patches.

TECHNICAL DATA SHEET (TDS)			
Name of Product	HDPE Geomembrane		
Product Content	High Density Polyethylene		
Width-Length	Between 2,2-7 m - Desired height and dimensions		
Thickness	Between 1-3 mm		
Packing	In nylon packing-Tracked		
Color	Black- (The desired colors)		
Standart No	TS EN 13967-13361-13362-13491-13492-13493		

MECHANICAL AND CHEMICAL PROPERTIES				
Features	Standard	Requirement	AHED Result	
Visible Defects (Cracks, scratches, tears, deformation)	TS EN 1850-2	Shouldn't be visible defects	There are no visible defects.	
Length	TS EN 1848-2	Should be between registered tolerances	Registered values	
Width	TS EN 1848-2	Should be between registered tolerances	Registered values	
Thickness	TS EN 1849-2	Should be between registered tolerances	Registered values	
Mass per unit area	TS EN 1849-2	Should be between registered tolerances	Registered values	
Density (g /cm3)	TS 1320	Between 0,93-0,97	0,94	
Waterproofing (0,15 Bar Basınç Altında)	EN 14150	Must be waterproof	Waterproof	
Tensile Strength (N/mm2), Min.	EN ISO 527	Min. 26 N	27	
Elongation Rate at Break (%), Min.	EN ISO 527	Min. %700	750	
Resistance to Weather Conditions (%)	EN 12224	Between 1-10	4%	
Resistance to Oxidation (%)	EN 14575	Max. %5	2%	
Gas Tightness	ASTM D 1434	NPD	NPD	
Tear Strength (kN/m)	ISO 34-1	Between 166-220	190	
Resistance Against Hot and Cold (Waiting 10 min. At 80 °C and -30 °C)	DIN 53361	No cracks and tears	There is no tearing and cracking.	
Combustion Class	TS EN 13501	Classification	Class E	
Flexibility in the cold	EN 495-5	No break and crack	There is no breaking or cracking.	