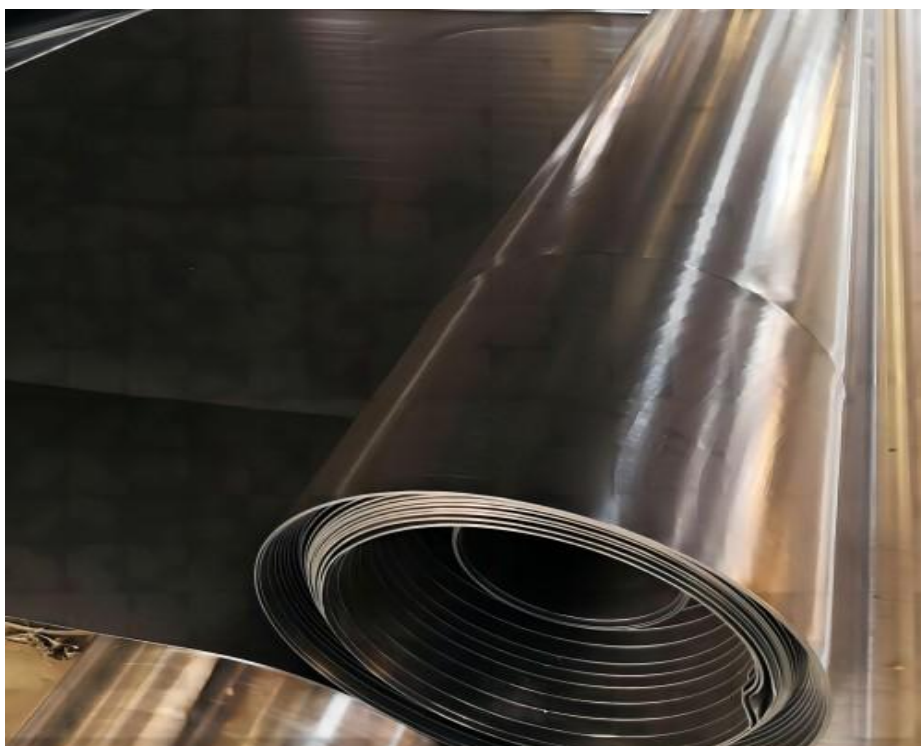


EVA (Ethylene-Vinyl Acetate Copolymer) Geomembrane

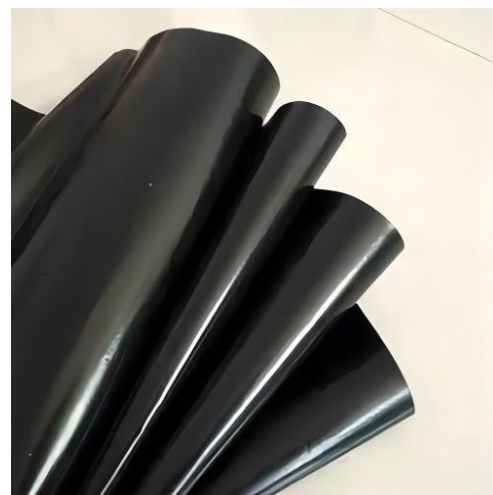
EVA geomembrane is one of the geomembrane series products. EVA is ethylene-vinyl acetate copolymer. It has good flexibility, elasticity, weather resistance, environmental stress cracking resistance and bonding properties. All mechanical indicators are Higher than ordinary polyethylene, because it also has strong flexibility, it is very convenient during construction and the welding effect is very good. EVA geomembrane is a new type of waterproof material. It is soft and has the best flexibility and low temperature resistance among polyolefins. It is a substitute for PVC anti-seepage membrane.

EVA geomembrane has excellent flexibility, elasticity, flexibility, environmental stress cracking resistance and bonding properties. Moreover, the mechanical indicators of EVA geomembrane are much higher than those of ordinary polyethylene. At the same time, it also has strong flexibility, so it is very convenient during construction and the welding effect is very good.



[EVA (Ethylene-Vinyl Acetate Copolymer) Geomembrane]

EVA geomembrane has excellent physical properties, such as high strength, high toughness, excellent heat resistance, aging resistance, UV resistance, chemical corrosion resistance, etc. Therefore, EVA geomembrane has a wide range of applications in anti-seepage, anti-corrosion, isolation, reinforcement, etc.



EVA (Ethylene-Vinyl Acetate Copolymer) Geomembrane Features:

- Compactness: Sodium bentonite forms a high-density diaphragm under water pressure and has strong self-retaining water properties.
- Has permanent waterproof performance.
- Easy construction and short construction period: Compared with other waterproof materials, construction is relatively simple. GCL has the shortest construction period among existing waterproof materials.
- Not affected by temperature: it will not break brittlely in cold climate conditions.
- Integration: Integration of waterproof materials and objects.
- Green and environmentally friendly: Bentonite is a natural inorganic material that is harmless to the human body and has no special impact on the environment. It has good environmental performance.

APPLICATION

1. In the field of anti-seepage, EVA geomembrane is usually used as a waterproof layer in dams, tunnels, subways, highways, railways, etc.
2. In construction projects, EVA geomembrane can be used as the waterproof layer of roofs, basements, pools and other buildings. In addition, EVA geomembrane can also be used as an anti-seepage layer in waste soil sites, landfills, mining contaminated land treatment and other fields.
3. In the field of isolation, EVA geomembrane is usually used to isolate different levels in projects, such as isolating roadbed and foundation, isolating soil and water sources, isolating lawn and soil, etc. At the same time, EVA geomembrane can also be used as an isolation layer for sewage and drinking water in channels, water conservancy projects and pools.
4. In the field of reinforcement, EVA geomembrane can be used for foundation reinforcement, improving the bearing capacity and stability of the foundation, and for crack prevention and reinforcement of concrete surfaces.

SPECIFICATIONS OF EVA (ETHYLENE-VINYL ACETATE COPOLYMER) GEOMEMBRANE

Item	Test method	GMS0.5	GMS0.75	GMS1.0	GMS1.25	GMS1.5	GMS2.0	GMS2.5
Properties	ASTM							
Thickness	D5199	0.5mm	0.75mm	1.00mm	1.25mm	1.50mm	2.00mm	2.50mm
Density (≥ g/cc)	D1505	0.94	0.94	0.94	0.94	0.94	0.94	0.94
• yield strength		8kN/m	11 kN/m	15 kN/m	18 kN/m	22 kN/m	29 kN/m	37kN/m
• break strength		14kN/m	20kN/m	27 kN/m	33 kN/m	40 kN/m	53 kN/m	67kN/m
• yield elongation		12%	12%	12%	12%	12%	12%	12%
• break elongation		700%	700%	700%	700%	700%	700%	700%
Tear Resistance (≥)	D 1004	64N	93 N	125 N	156 N	187 N	249 N	311 N
Puncture Resistance (≥)	D 4833	160 N	240 N	320 N	400 N	480 N	640 N	800 N
Stress Crack Resistance (≥)	D 5397	500 hr.	500 hr.	500 hr.	500 hr.	500 hr.	500 hr.	500 hr.
Carbon Black Content	D 1603	2.0-3.0%	2.0-3.0%	2.0-3.0%	2.0-3.0%	2.0-3.0%	2.0-3.0%	2.0-3.0%

PROJECTS CASE OF EVA (ETHYLENE-VINYL ACETATE COPOLYMER) GEOMEMBRANE



[Pond Lining in Indonesia]



[Agricultural Irrigation System Anti-seepage in Egypt]

EVA (ETHYLENE-VINYL ACETATE COPOLYMER) GEOMEMBRANE CONSTRUCTION

Construction method of geomembrane:

- It should be extended from the bottom to the high level. Do not pull too tightly. There should be 1.50% of the remaining sinking stretch. Considering the actual situation of this project, the slope adopts the order of laying from top to bottom;
 - The two adjacent vertical joints should not be on a horizontal line, and it should be staggered by more than 1m;
 - The vertical connector should be from the dam of the dam.
- At the bending foot of 1.50m, it should be located on the plane;
- First slope and backcourt;
 - When the slope is laid, the direction of the exhibition membrane should basically parallel on the maximum slope line.

Climate requirements for geomembrane construction:

- The temperature should geomembrane be above five degrees Celsius. At low temperature, the geomembrane should be tense, and the geomembrane should be relaxed at high temperature.
- The wind is below level four.
- When the temperature is too low, the wind and rainy weather above level 4 should not be constructed.
- David weather and wind force affect the construction of the geomembrane, the HDPE geomembrane to be welded and the sandbags are applied.

- Environmental protection and sanitation: such as landfill, sewage treatment plant, power plant regulation pool, industrial and hospital solid waste, etc.
- Gardening: Artificial Lakes, rivers, reservoirs, pool bottoms of golf courses, slope protection, waterproof and moisture-proof green lawn, etc.
- Petrochemical: chemical plant, refinery, oil storage tank anti-seepage, chemical reaction tank, sedimentation tank lining, secondary lining, lining and secondary lining of chemical plants, etc.
- Mining: Washing tank, heap leaching tank, ash yard, dissolution tank, sedimentation tank, storage yard, bottom lining anti-seepage of tailings, etc.
- Transportation facilities: foundation reinforcement of highways, anti-seepage of culverts.
- Agriculture: Reservoir, drinking water pool, storage pond, waste residue treatment field, and anti-seepage of irrigation system.

