

Contain almost anything. *Especially costs.*

By forming a flexible, durable barrier that's impermeable to most liquids and chemicals, Plastatech® geomembranes are highly effective at containing and controlling materials, runoff, chemicals, spills and more.

Our proven, reliable, thermoplastic barriers are the smart choice — helping you reduce installation and maintenance costs, protect the environment and comply with regulations.*

Plastatech geomembranes meet the intense, long-term durability and environmental challenges found in waste management, secondary containment, oil and natural gas and aquaculture industries. The polyvinyl chloride (PVC) membranes we manufacture withstand extreme temperature, deliver exceptional tensile and puncture strength and can be formulated to resist harsh chemical attacks.

Greater flexibility. Greater control.

We developed our PVC geomembranes with maximum flexibility for ease of handling and installation.

They can be factory- or field-welded, by third-party fabricators and installers, making installation and maintenance easier and more cost-effective. Made in the USA, our rugged geomembranes take on tough weather conditions in exposed or covered applications — while helping to eliminate product loss, leaks or leaching.

We offer both reinforced and non-reinforced membrane options for a wide range of applications. The heat-welded seams withstand dead loads, and the membranes won't delaminate or wick.

Our diverse product line includes:

- Plastatech IG (Industrial Grade) geomembrane
- Plastatech FG (Fish Grade) geomembrane
- Plastatech OR (Oil Resistant) geomembrane
- Plastatech Tech 5[®] geomembrane
- Plastatech Tech 7® geomembrane
- Custom-fabricated geomembrane accessories
- Embossed films

^{*}Reference your local and federal containment regulations for complete compliance requirements.



Quality:It starts with expertise and ends with control.

Research and development. Anything but ordinary.

At Plastatech, we serve you best by taking time to understand key aspects of your project. This helps us find exceptional solutions for even the most challenging customer applications.

Attention to detail has helped us meet a variety of specialized needs with the right combinations of high-performance films, plasticizers for flexibility, scrims for reinforcement and additives to protect against UV degradation, aging, swelling, delamination and chemical degradation — as well as fungicides, biocides, antioxidants, carbon black or other components to suit specific applications.

This is how we have created a line of products including calendered films, laminates, weft inserted textiles and industrial membranes.

Our Research & Development and Quality Control teams are highly trained at formulation and quality assurance to deliver tested and high-performance solutions. Performance tests include but are not limited to:

- Thermal analysis
- Rheometry

- Raman spectroscopy
- Accelerated weathering

All testing is done in our laboratory, to find the most cost-effective solutions to real-world situations.

Manufacturing experience sets it all in motion.

The Plastatech vertically integrated manufacturing process combines specially selected raw materials — coupled with handson expertise — to produce thermoplastic geomembrane products that meet or exceed industry standards.

Our laminators are capable of combining two layers of vinyl film with a layer of high strength polyester scrim. This proprietary system imparts outstanding physical properties to all of our engineered products. Additionally, Plastatech produces vinyl film sheets using state-of-theart extruding and calendering equipment. The computerized compounding system controls all aspects of the manufacturing process to produce consistent, high-quality films.

Quality. Control.

We subject our materials to a variety of quality control testing methods to ensure that the products used on your project are built to last. For example, our in-house xenon-arc Weather-Ometer® and QUV® accelerated weathering tester both provide valuable weathering data to help ensure weathering performance.

As part of our quality assurance process, we combine continual in-line testing procedures during manufacturing with ongoing post-production audits. A certificate of analysis is available upon request for every product we manufacture.

Our products are also field-tested under extreme conditions and when necessary, are exposed to UV rays in various geographical locations and climates. Their outdoor performance is tested and validated through EMMAQUA® accelerated weathering and static weathering studies.

Customer support.

From start to finish, our research and development experts are here to assist you. That may include helping you select the proper materials or products for your project, providing on-site manufacturing consultations, or recommending ideal welding applications. No matter what type of support you need, from formulation to testing and manufacturing; our goal is to ensure your total satisfaction.

Beyond Geo

Known as the "World's Best Roof®", Plastatech Engineering has been manufacturing high-performance membranes for Duro-Last® single-ply roofing systems since 1988. Plastatech's ability to produce PVC membranes that are resistant to a wide range of chemicals, as well as UV degradation, provide an ideal solution for low-slope commercial roofing applications in all climates.





LANDFILL

Durable membranes for tough applications.

What many think is simply a pile of trash is actually a complex system designed to prevent waste products from leaching into groundwater, lakes and streams. It depends on a system of barriers that often includes synthetic geomembranes for primary and secondary leachate containment and for a cover over a closed landfill.

Because it stands between thousands of tons of mixed waste and terrain that may be uneven and rough, a liner geomembrane must have excellent tear strength and flexibility. Given the strange brew of materials that leach from landfill waste, the liner must be resistant to a broad spectrum of chemicals. Liners and



covers must be resistant to thermal and biological degradation.

Plastatech geomembranes are engineered to meet the demanding requirements of landfill applications. Our proprietary PVC formulation, known for its slow rate of biodegradation, offers an optimal combination of longevity, flexibility, tear strength and puncture resistance under a wide range of thermal conditions. They are highly resistant to water and most oils and chemicals, making them suitable for most municipal solid waste applications, and many types of landfills. The flexibility of our geomembranes also makes them well suited for landfill cap applications, which must handle the stresses of differential settlement of waste.

All of this, combined with the ability to be custom-fabricated, reducing the number of on-site seams needed, Plastatech geomembranes are an ideal solution for landfill applications.

Plastatech Geomembranes for Landfill Applications

Plastatech offers four products suitable for landfill applications. All feature laminated PVC films that are flexible, durable and resistant to most waste materials. Our Plastatech Tech 5 and Plastatech Tech 7 are reinforced with a heavy-duty polyester scrim.

	C. Washington	Plastatech [®] IG	Plastatech [®] OR	Plastatech [®] Tech 5 [®]	Plastatech* Tech 7*
Special Properties			Oil Resistant	Fabric Reinforced	Fabric Reinforced
	10-mil	•			
Thickness	20-mil	•			
	30-mil			•	
	40-mil	•			•
	64.25″			•	
Width	76.25″	•			
VVIatii	120″				•
	Custom	•	•	•	•
Color*	Gray	•			
COIOI	Black	•	•	•	•

^{*}Custom colors and membrane made to custom specification are available upon request. Please contact us for more information. Minimum order size may apply.

SECONDARY CONTAINMENT

The bottom line on spill protection.

Storage tanks, portable containers, piping, equipment — if it carries or contains anything considered a contaminant, the Spill Prevention, Control, and Countermeasure (SPCC) Rule through the Environmental Protection Agency (EPA) requires some form of secondary containment. Plastatech geomembranes make excellent secondary containment barriers, particularly for large or difficult applications.

Resistant to most oils and chemicals, PVC is an excellent material for secondary containment in a wide range of applications, including:

- Petroleum wells, refineries and storage facilities
- · Chemical processing, transport and storage
- Manufacturing processes such as cutting oils and coolants
- Wastewater processing
- Mining



Our geomembranes are specially formulated to remain highly flexible and resistant to cracking or puncture on rough or uneven surfaces — even across the entire range of normal operating temperatures. They can also be formulated to be highly resistant to degradation from ultraviolet light, making them suitable for a wide range of applications that are exposed to the elements.

Most Plastatech geomembranes are ideal for custom-fabrication by fabricating specialists to reduce the number of field-welded seams. This not only offers faster installation, but greater confidence in weld strength, particularly in large containment areas.



Plastatech Geomembranes for Secondary Containment Applications

Plastatech offers four products suitable for secondary containment applications. All feature laminated PVC films that are flexible, durable and resistant to most waste materials. Our Plastatech Tech 5 and Plastatech Tech 7 are reinforced with a heavy-duty polyester scrim.

		STATE OF STA	NAME OF TAXABLE PARTY.	A DESCRIPTION OF THE PARTY OF T	
		Plastatech [®] IG	Plastatech* OR	Plastatech [®] Tech 5 [®]	Plastatech* Tech 7*
Special Properties			Oil Resistant	Fabric Reinforced	Fabric Reinforced
	10-mil	•			
Thickness	20-mil	•			
	30-mil		•	•	
	40-mil	•			•
	64.25″			•	
	76.25″	•	•		
Width	120″				•
	Custom	•	•	•	•
0.1*	Gray	•	•		
Color*	Black	•	•	•	•

^{*}Custom colors and membrane made to custom specification are available upon request. Please contact us for more information. Minimum order size may apply.

See our complete product comparison chart on page 28.

WASTEWATER CONTAINMENT

Made for harsh treatment.



Wastewater containment generally includes large, shallow basins for settlement, treatment and storage. These basins must not only be watertight, but impervious to both the harsh chemicals used in the treatment process and the active biological agents in wastewater. Plastatech geomembranes are well-suited for both primary and secondary containment in wastewater treatment facilities.

Building on the excellent chemical, water and biodegradation resistance of PVC, Plastatech membranes can be formulated to withstand UV exposure and retain their properties through high and low temperature extremes. They are also flexible with high tensile strength, making them easy to install in irregularly contoured areas.

Installation is even easier — and faster — when the membrane is custom-fabricated in a controlled environment by fabricating specialists. Plastatech geomembranes are ideal for custom-fabrication, which can reduce the number of field seams by as much as 70 percent.



Plastatech Geomembranes for Wastewater Applications

Plastatech offers four products suitable for wastewater containment applications. All feature laminated PVC films that are flexible, durable and resistant to most waste materials. Our Plastatech Tech 5 and Plastatech Tech 7 are reinforced with a heavy-duty polyester scrim.

		Plastatech* IG	Plastatech* OR	Plastatech [®] Tech 5 [®]	Plastatech* Tech 7°
Special Properties			Oil Resistant	Fabric Reinforced	Fabric Reinforced
Mark Comment	10-mil	•			
Thickness	20-mil	•			
	30-mil	•	•	•	
	40-mil	•			
	64.25″			•	
Width	76.25″	•	•		
vvidili	120″				
	Custom	•	•	•	•
Color*	Gray	•	•		
COIOI	Black	•	•	•	

^{*}Custom colors and membrane made to custom specification are available upon request. Please contact us for more information. Minimum order size may apply.

See our complete product comparison chart on page 28.

PONDS, CANALS & CISTERNS

Strength beyond the surface.

They might be completely decorative, part of an industrial process, or holding a water supply for a farm, a nursery or an entire city. But ponds, canals and cisterns all have one thing in common: They need to be watertight.

Plastatech geomembranes make excellent liners for various types of ponds, canals, cisterns and other water containment systems. Ours can be formulated to resist certain chemicals and oils, and can expertly balance flexibility with puncture-and-tear resistance. In addition, our membranes conform to irregular terrain without stress or strain from settling. They remain flexible in hot and cold temperatures and can be formulated to resist degradation from ultraviolet light and biological agents.

Our Plastatech FG (Fish Grade) geomembrane is suitable for use when water applications must support aquatic life.

Plastatech geomembranes are also suited for custom-fabrication in a factory setting by fabricating specialists — reducing the number of field seams and installation time.





^{*}Custom colors and membrane made to custom specification are available upon request. Please contact us for more information. Minimum order size may apply.

See our complete product comparison chart on page 28.

AQUACULTURE

Put your big fish in the right-sized pond.

Contamination from fuels to fertilizer can be detrimental to aquatic life, which is why liners for ponds and tanks that support aquatic life must not only hold water in but also keep dangerous materials out.

Like all our geomembranes, Plastatech FG (Fish Grade) offers excellent resistance to most oils and chemicals. It also stands up to the



harsh conditions of a saltwater application. Yet it is specially formulated to be nontoxic to aquatic life.

Plastatech FG has the high tensile strength and flexibility of all Plastatech geomembranes, making it easy and safe to install. It remains flexible in hot and cold temperatures and is formulated to be highly resistant to UV degradation, making it suitable for exposed applications. It also resists biodegradation.

Plastatech FG can also help you save money and time on installation. It's well suited for custom-fabrication in a controlled factory environment by fabricating specialists.

This greatly reduces the number of necessary field welds and reduces installation and callback costs.



		Plastatech* FG
Special Properties		FBP-1094 Compliant
	10-mil	
Thickness	20-mil	•
	30-mil	•
Width	64.25″	
	76.25″	•
	Custom	•
Color*	Gray	•
	Black	•



^{*}Custom colors and membrane made to custom specification are available upon request. Please contact us for more information. Minimum order size may apply.

See our complete product comparison chart on page 28.

WATERPROOFING

Keeping liquid in and out

If it's engineered to keep liquids in, it will do an excellent job of keeping them out, as well. That's why Plastatech IG (Industrial Grade), Plastatech Tech 5 and Plastatech Tech 7 geomembranes are ideal for basement wall and foundation waterproofing — in commercial and industrial applications. It provides a highly effective barrier to water intrusion in any climate.

The membrane is typically attached with a termination bar and adhered to the concrete or block foundation wall. It usually drains into free-draining gravel fill and perforated drain tile, but it can work in conjunction with nearly any drainage and waterproofing system.

Plastatech geomembranes are also used to waterproof foundations of specialized structures. For example, a water barrier outside a concrete secondary containment basin can help prolong the life of the concrete, protecting it from the effects of water intrusion and freeze-thaw cycles.

Their flexibility and puncture-and-tear resistance allows them to be installed against



concrete, block and even old brick foundations
— while avoiding punctures and tears during
backfill. Their flexibility in high and low
temperatures allows them to provide years of
trouble-free use.



Plastatech Geomembranes for Waterproofing

Plastatech IG, Plastatech Tech 5, and Plastatech Tech 7 are all suitable for waterproofing applications.

		Plastatech* IG	Plastatech [®] Tech 5 [®]	Plastatech* Tech 7*
Special Properties			Fabric Reinforced	Fabric Reinforced
	10-mil	•		
Thickness	20-mil	•		
	30-mil	•	•	
	40-mil	•		•
Width	64.25″		•	
	76.25″	•		
vvidtii	120″			•
	Custom	•	•	•
Color*	Gray	•		
	Black	•	•	•

^{*}Custom colors and membrane made to custom specification are available upon request. Please contact us for more information. Minimum order size may apply.

CHEMICAL HOLDING BASINS

We get an 'A' in chemistry.



Many industrial and mining processes require chemical basins or lagoons — either for storage, secondary containment or processes such as solvent extraction. Plastatech OR (Oil Resistant) geomembrane is engineered to resist most chemicals — including oils, acid and alkalies as well as a wide range of chlorinated, aromatic and aliphatic hydrocarbons.

Plastatech OR is extremely flexible and tearand-puncture resistant, allowing it to conform to terrain or basins with lower risk for leaks. It can be custom-fabricated by fabricating specialists in a factory environment, reducing the number of field seams. Additionally, Plastatech OR maintains its properties in most climate conditions and can be formulated to be resistant to ultraviolet degradation, offering years of service life.



		Plastatech [®] OR
Special Properties		Oil Resistant
	10-mil	
Thickness	20-mil	
	30-mil	•
	64.25″	
Width	76.25″	•
	Custom	•
Color*	Gray	•
	Black	•



^{*}Custom colors and membrane made to custom specification are available upon request. Please contact us for more information. Minimum order size may apply.

See our complete product comparison chart on page 28.

STORAGE

Keep the weather out and the material in.



From sugar beets to coal ash, Plastatech geomembranes are used to keep a wide variety of materials high and dry. They make a tough, chemical-resistant liner to hold materials and prevent leaching as well as a durable, weather-resistant cover.

Plastatech's unique PVC formulations offer a balance of oil, acid, alkali and other

chemical resistance with high flexibility and tear resistance. This offers an effective, leak-free liner that conforms to terraced excavations, uneven terrain and other substrates — and a supple, efficient cover. Their thermal performance and UV resistance capabilities

make Plastatech geomembranes exceptionally durable in any environment. They can also be custom-fabricated into larger sheets by fabricating specialists to reduce the number of field seams, cut installation time and better control quality.



Plastatech Geomembranes for Storage

Plastatech offers four products suitable for storage. All feature laminated PVC films that are flexible, durable and resistant to most oils and chemicals. Plastatech Tech 5 and Plastatech Tech 7 are reinforced with a heavy-duty polyester scrim; Plastatech FG passes FBP-1094 chronic fish toxicity testing.

	777	Plastatech* IG	Plastatech® FG	Plastatech* OR	Plastatech* Tech 5*	Plastatech* Tech 7*
Special Properties			FBP-1094 Compliant	Oil Resistant	Fabric Reinforced	Fabric Reinforced
	10-mil	•				
Thickness	20-mil	•	•			
	30-mil	•	•		•	
	40-mil	•				•
	64.25″				•	
Width	76.25″	•	•			
vvidui	120″					
	Custom	•	•	•	•	•
0.1. *	Gray	•	•	•		
Color*	Black	•	•	•	•	•

^{*}Custom colors and membrane made to custom specification are available upon request Please contact us for more information. Minimum order size may apply.

PRODUCTS

Plastatech IG (Industrial Grade) Geomembrane

Plastatech IG geomembrane was developed for applications such as landfills, canals, ponds and other containment purposes. This geomembrane can be formulated to withstand UV exposure, atmospheric pollutants and harsh chemicals commonly found in industrial settings.

Plastatech IG geomembrane offers excellent lay-flat characteristics and meets ASTM D7176 requirements.



Thickness	10, 20, 30 mil
Width	76.25″ / Custom
Color	Black / Gray (other colors avaliable upon request)
Tensile breaking strength (ASTM D882), lb _t /inch	10 mil: 24 min.20 mil: 48 min.30 mil: 73 min.40 mil: 97 min.
Applications	 Landfill liners and caps Secondary containment Wastewater containment Containment ponds Canals
	·

Plastatech FG (Fish Grade) Geomembrane

Plastatech FG geomembrane is designed for aquatic environments and landscaping applications. This geomembrane provides unsurpassed tensile strength and flexibility and has excellent lay-flat characteristics, making it easier to install in irregularly contoured areas.

Our Plastatech FG geomembrane is suitable for use when water applications must support aquatic life.



Thickness	20, 30 mil
Width	76.25" / Custom
Color	Black / Light Gray
Tensile breaking strength (ASTM D882), lb _t /inch	20 mil: 48 min.30 mil: 73 min.
Applications	 Fisheries Hatcheries Food processing Ponds Cistern liners Recreational fish ponds

PRODUCTS

Plastatech OR (Oil Resistant) Geomembrane

Plastatech OR geomembrane provides protection from exposure to oils, fuels and harsh chemicals commonly found in industrial and oil refinery settings. This geomembrane was developed as a solution for primary and secondary containment of oil products and industrial chemicals.

Plastatech OR geomembrane offers excellent chemical resistance and maximum flexibility, elongation and tensile strength for long-term design performance in accordance with various ASTM standards.



Thickness	30 mil
Width	76.25" / Custom
Color	Gray / Black
Tensile breaking strength (ASTM D882), lb _t /inch	• 30 mil: 73 min.
Applications	 Primary and secondary containment Chemical holding basins Oil field storage Crude oil storage Fuel tank storage facilities Landfill liners and caps Wastewater lagoons Industrial lagoons

Plastatech Tech 5°



Plastatech Tech 5 geomembrane helps contain chemicals and other pollutants commonly found in landfills, reservoirs, chemical processing plants, refineries, manufacturing facilities and water

treatment operations. It is reinforced with a high-tenacity, anti-wicking, polyester scrim that provides exceptional dimensional stability, puncture strength and durability. Our proprietary process delivers a cohesive bond between the high-thread-count scrim and the films, creating a non-separable, long-lasting adhesion that will not delaminate.

Plastatech Tech 5 can be easily installed in exposed areas and high stress applications requiring protective barriers. It will perform satisfactorily when properly field-fabricated and incorporated into an installation over a suitable base of pre-consolidated soil.

Thickness	30 mil
Width	64.25" / Custom
Finished weight	30 oz/yd²
Color	Black
Applications	 Wastewater containment Secondary containment Secondary lining Landfill caps Containment ponds



Plastatech Tech 7[®]

Plastatech Tech 7 geomembrane is our toughest membrane yet, designed to remain strong in harsh environments and helping to contain a variety of chemicals and pollutants commonly found in water treatment operations. Reinforced with a high-tenacity, anti-wicking, polyester scrim that provides exceptional dimensional stability, puncture strength and durability, this geomembrane delivers a cohesive bond between the high-thread-count scrim and film, creating a non-separable, long-lasting adhesion that will not delaminate.

Plastatech Tech 7 can be easily installed in exposed areas and high stress applications requiring protective barriers. It will perform satisfactorily when properly field fabricated and incorporated into an installation over a suitable base of pre-consolidated soil.

Thickness	40 mil	
Width	120" / Custom	
Finished weight	43.18 oz/yd²	
Color	Black	
Applications	 Wastewater containment Secondary containment Secondary lining Landfill caps Containment ponds 	



Custom-Fabricated Accessories

Plastatech's accessories are custom-manufactured in quality-controlled factory conditions. These accessories are available in a variety of materials, and allow you to achieve faster installation times while lowering the risk of leaks or failures. Additionally, our customizable options are designed to meet the needs of a variety of installation challenges.

Plastatech accessories for our family of geomembranes include:

- Pipe boots
 - Angled and straight configurations
 - Open or closed styles
- Corners
 - Inside and outside configurations

Products are available in the following materials:

- Polyvinyl chloride (PVC)
- High-density polyethylene (HDPE)
- Linear low-density polyethylene (LLDPE)
- Reinforced polyethylene (RPE)
- Reinforced polypropylene (RPP)
- Thermoplastic olefin (TPO)



PRODUCTS

Product Selection Guide



Special Properties					
ASTM D5199	Thickness				
ASTM D751					
ASTM D792	Specific Gravity				
ASTM D882	Tensile Breaking Strength Ib _f /in				
ASTM D751					
ASTM D1004	Tear Resistance lb _f				
ASTM D4533					
ASTM D751	Tear Strength lb _f				
ASTM D751	Hydrostatic Resistance psi				
	Width				
	vvidin				
	Color				

	Plastatech* IG	Plastatech* FG	Plastatech® OR	Plastatech* Tech 5*	Plastatech* Tech 7*
		FBP-1094 Compliant	Oil Resistant	Fabric Reinforced	Fabric Reinforced
		Nominal ± 5%			
				Nomin	al ± 5%
	1.20 min.	1.20 min.	1.20 min.		
10-mil	24 min.				
20-mil	48 min.	48 min.			
30-mil	73 min.	73 min.	73 min.		
40-mil	97 min.				
30-mil				450 MD / 390 CMD	
40-mil					696 MD/655 CMD
10-mil	2.5 min.				
20-mil	6.0 min.	6.0 min.			
30-mil	8.0 min.	8.0 min.	8.0 min.		
40-mil	10.0 min.				
30-mil				94 MD / 68 CMD	
40-mil					349 MD/187 CMD
10-mil	42 min.				
20-mil	68 min.	68 min.			
30-mil	100 min.	100 min.	100 min.	> 660	
40-mil	120 min.				
64.25″				•	
76.25″	•	•			
120″					•
Custom	•	•		•	
Gray	•	•	•		
Black		•		•	•
Custom	•	•		•	•

PRODUCTS

Out-of-the-Ordinary R&D

We know we can serve you best by making sure we take the time to understand your needs. Our product testing is done in our in-house laboratory, allowing us to find cost-effective solutions to real-world situations. Plastatech has the ability to perform testing beyond what is most commonly reported and can provide you with the additional testing data to ensure your project directors have peace of mind when completing a job.

Our attention to detail helps us meet your unique needs with the right combinations of high-performance films, specialized formulations for flexibility, scrims for reinforcement and additives to protect against degradation, aging, swelling and delamination — as well as fungicides, biocides, antioxidants, carbon black or other components to suit specific applications.





Additional Testing

Plastatech offers additional testing of our geomembranes depending on your specific needs. Below is a list of tests we are capable of running to better meet your needs.

Laminate Tests								
OverallThickness	Thickness Over Scrim	Breaking Strength	Elongation	Seam Strength				
Tear Strength	LowTemp Bend	Low Temp Bend	Heat Aging	Accelerated Aging				
Dimensional Stability	Water Absorption	Static Puncture	Dynamic Puncture	Color Check				
Tear Resistance TongueTearTest Method	Tear Resistance Trapezoidal Tear	Interply Adhesion Strength	Weight	Dimensions				
Bursting Strength	Puncture Resistance	Accelerated Heat Aging	Wicking of Coated Cloth	Hydrostatic Resistance				
Film Tests								
Thickness	Specific Gravity	Breaking Strength	Elongation at Break	100% Modulus				
Tear Resistance	Low Temperature Impact	Dimensional Stability	Water Extraction	Volatile Loss				
Hydrostatic Resistance	Accelerated Aging	Color Check	Gloss					
Scrim Tests								
Break Strength	Weight	Wicking						



For information on Plastatech, call or visit our website today.

800-892-9358 plastatech.com

