High Performance UltraFlex Geomembrane

High Performance GSE UltraFlex products are linear low density polyethylene (LLDPE) geomembranes specifically designed to be used in the most stringent applications where additional flexibility is needed.

GSE UltraFlex products are available in a variety of colors such as green for more aesthetic landfill caps and white for a solar reflective upper surface. The upper surface, lower surface, or both surfaces can be textured for use in applications where increased frictional resistance is required. The bottom surface can be comprised of a conductive layer to enable liner integrity surveys to be performed following installation of the liner.

PREMIUM RAW MATERIALS

Only the finest raw materials are selected for High Performance GSE UltraFlex. GSE utilizes LLDPE resin that has been specifically engineered for remarkable flexibility. Rather than using plasticizers or additional fillers to enhance the flexibility, the inherent structure of LLDPE provides the added flexibility. It is free of any fillers and nonessential additives to achieve the highest performance possible.

BENEFITS OF LINEAR LOW DENSITY POLYETHYLENE

Linear low density polyethylene (LLDPE) is specifically designed to provide superior flexibility. The break elongation and multi-axial performance of High Performance GSE UltraFlex is well above the industry standard.

<table>
<thead>
<tr>
<th>SPECIFICATION</th>
<th>BREAK ELONGATION (%)</th>
<th>MULTIAXIAL BREAK ELONGATION (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GRI GM 17</td>
<td>800</td>
<td>30</td>
</tr>
<tr>
<td>HIGH PERFORMANCE GSE ULTRAFLEX SMOOTH</td>
<td>900</td>
<td>90</td>
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[Superior Flexibility]
ENGINEERED ANTIOXIDANT PACKAGE
High Performance GSE UltraFlex includes a specially engineered additive package to ensure the geomembrane maintains its superior mechanical properties. These high quality additives are highly resistant to extraction and will inhibit geomembrane degradation due to harsh chemicals, elevated temperatures, and UV exposure.

QUALITY ASSURANCE
All GSE geomembrane production involves three levels of quality assurance. First, raw material suppliers must comply with GSE specifications on incoming resin. Before the resin is unloaded from the railcar, GSE verifies the raw material test results that are submitted by our suppliers by performing selected conformance tests. The second level of QA occurs during production. As each roll is produced, it is electronically monitored for pinholes. Finally every roll of GSE product undergoes a rigorous Quality Assurance program after production to ensure the mechanical properties are intact and meet or exceed GSE quality standards. All GSE laboratories are certified to meet GAI-LAP standards.

OUTSTANDING UV RESISTANCE
High Performance GSE UltraFlex has been engineered to have excellent resistance to UV radiation from the sun. A well-dispersed premium grade carbon black is utilized to support the additional UV protection that is provided by a smaller particle size of carbon black. A smaller carbon black particle provides additional surface area to increase UV absorption.

ENGINEERING SUPPORT
The GSE engineering support staff is available to help solve any issues you have with your project. It is comprised of a multidisciplinary group of professionals with knowledge across a wide range of products and their applications. This includes geomembranes, geosynthetic clay liners, geonets, geocomposites, and woven and nonwoven geotextiles.

CUSTOM FABRICATION
The GSE Custom Fabrication Group builds products to your exact specifications to fulfill any of your project requirements. We have extensive experience in prefabricated polyethylene products and components. A few examples of our custom fabricated products are Aqua Tanks, Quick Containment, concrete protection liners, boots, sumps, pads, pipes, daily covers, temporary containment, and containment booms.

INSTALLER NETWORK
The GSE Installer Network leads the industry with the most experienced, the largest, and the most flexible crews available around the world to meet your installation requirements. Each installer is equipped with state-of-the-art welding and testing equipment to ensure a successful installation. Selecting a qualified installer with the right product knowledge is critical to your success. Let GSE connect you to the right installer to handle your installation project of any size from start to finish.

1 Refer to the application sheet for GSE Green Surfaced Geomembranes for more information.
2 Refer to the application sheet for GSE White Surfaced Geomembranes for more information.
3 Refer to the application sheet for Electrically Leak Location Geomembranes for more information.