



**STATE OF WISCONSIN**  
Department of Agriculture,  
Trade and Consumer Protection

Approval # 20190007

Bureau of Weights and Measures  
Storage Tank Regulation  
P.O. Box 7837  
Madison, WI 53707-7837

## **Wisconsin ATCP 93 Material Approval**

Equipment: Solmax HDPE Geomembrane Liner

Manufacturer: Solmax  
0N581 N Weaver Cir  
Geneva, IL 60134

Expiration of Approval: December 31, 2022

---

### **SCOPE OF EVALUATION**

The Solmax HDPE Geomembrane manufactured by Solmax, have been evaluated for use as a synthetic containment material in accordance with **ATCP 93.130(3)(d)** of the current edition of the Wisconsin Administrative Flammable and Combustible Liquids Code. Solmax HDPE Geomembrane Liners are approved for use in the State of Wisconsin with all petroleum products, ethanol, and petroleum/ethanol blends.

This approval has been based upon Departmental evaluation of information submitted by the manufacturer and third party evaluation and is considered confidential. Specific information relating to qualifying the information submitted should be made to the manufacturer or submitter.

This evaluation summary is condensed to provide the specific installation and operational parameters necessary to maintain the subject systems in compliance with the Wisconsin Administrative Code – ATCP 93.

### **DESCRIPTION AND USE**

The Solmax HDPE Geomembrane Liners are made of high-density polyethylene. Both products are available with either a black, green, white or conductive surface. Approved thicknesses are 60, 80, and 100 mils. It can be provided in widths of 22.3, 22.5 or 34.5 feet. Seams are made by a heat fusion method, either by a hot shoe welder or by an extrusion welder. When installed over compacted soil, the ends of the liner are anchored in a trench. The trench must have rounded edges to avoid sharp bends in the liner.

Mechanical attachment to concrete may be achieved by using stainless steel fittings and neoprene gaskets. Neoprene caulk provides a liquid-tight adhesive attachment between gaskets and fittings. Another attachment method is the Poly-Lock channel. Poly-Lock is a formed HDPE insert which is cast into concrete to provide a weldable anchoring surface.

Solmax HDPE Geomembrane Liners are approved for use in the State of Wisconsin with all petroleum products, ethanol, and petroleum/ethanol blends.

### **TESTS AND RESULTS**

Solmax HDPE Geomembrane Liners were tested after immersion in gasoline, kerosene, and ethanol. In all cases, the physical property changes were within acceptable limits established by the department.

### **LIMITATIONS / CONDITIONS OF APPROVAL**

- Solmax HDPE Geomembrane Liners, with a minimum average thickness of 60 mils, are approved as meeting the requirements of **ATCP 93.130(3)(d)** when installed and tested in accordance with manufacturer's specifications. The soil layers above and below the liner, normally required under **ATCP 93.345(3)(d)2.**, are not required when installed and maintained in accordance with manufacturer's specifications.
- Field seams shall be oriented down a slope rather than across a slope.

- All installation, repair, and maintenance of the liner shall be performed in accordance with the manufacturer's procedures, recommendations, and all applicable codes. In addition, a qualified technician shall conduct all necessary maintenance and repair procedures as recommended by the manufacturer to assure continued and proper operation of the liner.

This approval will be valid through December 31, 2022, unless manufacturing modifications are made to the product or a re-examination is deemed necessary by the department. The Wisconsin Material Approval Number must be provided when plans that include this product are submitted for review.

**DISCLAIMER**

The Department is in no way endorsing or advertising this product. This approval addresses only the specified applications for the product and does not waive any code requirement unless specified in this document.

Effective Date: April 29, 2019

Reviewed by: Signature on File  
Erik Otterson  
Environmental Engineering Specialist  
Bureau of Weights and Measures

Approved by: Signature on File Date: 4/29/2019  
Greg Bareta, P.E.  
Storage Tank Regulation Chief  
Bureau of Weights and Measures