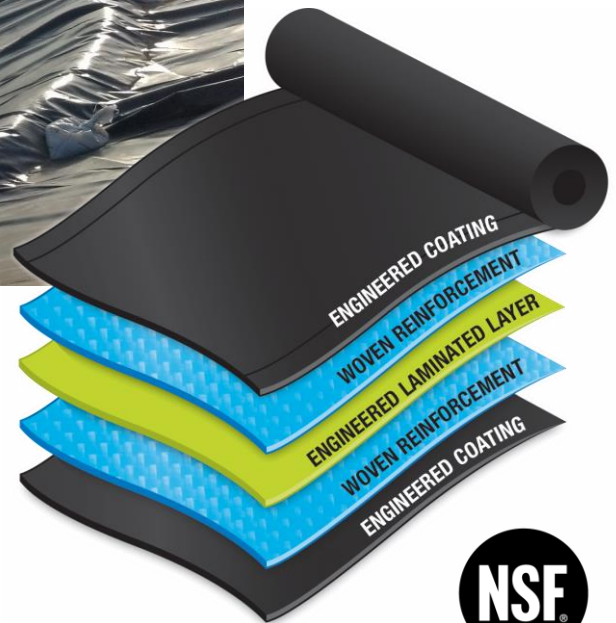


## ArmorLiner® 45L 22 OZ GEOMEMBRANE



### PRODUCT DESCRIPTION

A double scrim, heavyweight geomembrane fabric incorporating a special weave pattern to enhance thickness, flatness, and tear properties. The coating recipe is designed to improve toughness and abrasion resistance for exposed applications up to 20 years requiring extremely high puncture resistance and tensile strength.

### RECOMMENDED APPLICATIONS

Mining, Coal/Ash Remediation, Large Reservoirs, Long Term Containment Liners

### PRODUCT DIMENSIONS

**Cores** 4 inch I.D. or 5 inch I.D. available (10 cm or 13 cm)  
**Width** Up to 150 in (381 cm) (-0, +0.5) as ordered  
**Length** Minimum 250 yds/roll (229 m); up to 500 yds/roll (457 m)

### PRODUCT SPECIFICATIONS

**Weave** Two woven black HDPE scrims  
**Coating** LDPE, 3.0 mil average each side/laminate (72 g/m<sup>2</sup>/side)  
**Color** White, black or other colored coatings available  
**Weight** 22 oz/yd<sup>2</sup> (750 g/m<sup>2</sup>) ±5%



Certified to  
NSF/ANSI/CAN 61

These values are typical data and are not intended as limiting specifications.

## PERFORMANCE PROPERTIES

The following data are typical values based on ASTM standard tests. This data should not be considered specification.

<b>Thickness</b> ASTM D1777	Nominal 45 mil (1.12 mm), ± 10%
<b>Grab Tensile (N)</b> ASTM D7004	MD 845 lb (3759) TD 965 lb (4292)
<b>Strip Tensile (N/5cm)</b> ASTM D7003	MD 510 lb/in (4466) TD 535 lb/in (4684)
<b>Tongue Tear—large scale (N)</b> ASTM D5884	MD 130 lb (578) TD 150 lb (667)
<b>Mullen Burst</b> ASTM D751	1300 psi (8957 kPa)
<b>MVTR</b> ASTM E96 Proc. BW	0.25 g/m <sup>2</sup> · 24hr (0.04 perms)
<b>Hydraulic Conductivity (Permeability)</b> Calculated from MVTR	3.44 x 10 <sup>-14</sup> cm/s
<b>Hydrostatic Resistance</b> ASTM D751	880 psi (6063 kPa)
<b>Puncture Resistance</b> ASTM D4833	455 lb (2024 N)
<b>CBR Static Puncture</b> ASTM D6241	2265 lb (10,057 N)
<b>Carbon Black Content</b> ASTM D4218	3 %
<b>Dimensional Stability</b> ASTM D1204	MD -2.1% TD -1.5%
<b>Low Temperature Flex</b> ASTM D2136	MD & TD: Pass @ -65°C (-85°F)
<b>HP-OIT</b> ASTM D5885 (Measured on coating formulation)	3048 minutes
<b>Accelerated UV Weathering<sup>1</sup></b> ASTM D7238	>90% strength retention after 10,000 light hours

MD = Machine Direction. TD = Transverse Direction  
<sup>1</sup>Q.U.V [A-340 Lamps]; 20 hrs UV @ 75°C; 4 hrs condensation @ 60°C



Certified to  
NSF/ANSI/CAN 61

These values are typical data and are not intended as limiting specifications.

While we believe them to be reliable, the statements and information herein are only for general guidance and are not warrants or guarantees for accuracy and completeness. The user must, by test or otherwise, determine suitability for this purpose. There is no warranty of fitness for a particular purpose. Our standard term and conditions of sale apply exclusively to all orders, and all liability for damages of any kind, including consequential, exceeding purchase price is excluded. No one is authorized by us to make oral warranties. We reserve the right to make changes without notice or obligation in our products and publications.