GSE BentoLiner CAR NWL Geosynthetic Clay Liner

GSE BentoLiner “CAR NWL” is a needlepunched reinforced composite geosynthetic clay liner (GCL) comprised of a uniform layer of specially formulated polymer enhanced granular sodium bentonite encapsulated between a nonwoven and a scrim-nonwoven geotextile for dimensional stability. This product is intended for containment of potentially high ionic strength leachates typically encountered in coal combustion waste applications. The product is intended for moderate to steep slopes and moderate to high load applications where increased internal shear strength is required.

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<th>Test Method</th>
<th>Frequency</th>
<th>Value</th>
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| Cap Nonwoven, Mass/Unit Area | ASTM D 5261 | 1/200,000 ft² | 6.0 oz/yd² MARV
| Carrier Scrim Nonwoven, Mass/Unit Area | ASTM D 5261 | 1/200,000 ft² | 6.0 oz/yd² MARV
| Swell Index | ASTM D 5890 | 1/100,000 lb | 24 ml/2 g min
| Moisture Content | ASTM D 4643 | 1/100,000 lb | 12% max
| Fluid Loss | ASTM D 5891 | 1/100,000 lb | 18 ml max
| Bentonite Mass/Unit Area | ASTM D 5993 | 1/40,000 ft² | 0.75 lb/ft² MARV
| Tensile Strength | ASTM D 6768 | 1/40,000 ft² | 45 lb/in MARV
| Peel Strength | ASTM D 4696 ASTM D 4632 | 1/40,000 ft² | 3.5 lb/in MARV 21 lb MARV
| Hydraulic Conductivity | ASTM D 5887 | 1/Week | 5 x 10⁻⁹ cm/sec max
| Index Flux | ASTM D 5887 | 1/Week | 1 x 10⁻⁸ m³/m²/sec max
| Internal Shear Strength | ASTM D 6243 | Periodically | 500 psf Typical

NOTES:
• (1) Minimum Average Roll Value.
• (2) At 0% moisture content.
• (3) Tested in machine direction.
• (4) Modified ASTM D 4632 to use a 4 in wide grip. The maximum peak of five specimens averaged in machine direction.
• (5) Deaired, deionized water @ 5 psi maximum effective confining stress and 2 psi head pressure.
• (6) Typical peak value for specimen hydrated for 24 hours and sheared under a 200 psf normal stress.
• (7) Roll widths and lengths have a tolerance of ±1%.

GSE is a leading manufacturer and marketer of geosynthetic lining products and services. We’ve built a reputation of reliability through our dedication to providing consistency of product, price and protection to our global customers.

Our commitment to innovation, our focus on quality and our industry expertise allow us the flexibility to collaborate with our clients to develop a custom, purpose-fit solution.

For more information on this product and others, please visit us at GSEworld.com, call 800.435.2008 or contact your local sales office.