

BENTOSURE

NW5000C

ACTIVE MINERAL BARRIER

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| TECHNICAL DATA SHEET | G 122 004 |
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BentoSure is a reinforced (needle punched) GCL which consists of a layer of natural sodium bentonite between two geotextiles. All surface of the material is covered with polymeric membrane. BentoSure adopts unique self-seaming overlaps technology which doesn't require any additional treatment of its longitudinal edges.

| MATERIAL PROPERTY | TEST METHOD | TEST FREQUENCY | VALUES |
|---------------------------------------|---------------|-----------------------|------------------------------------|
| GEOTEXTILES | | | |
| COVER LAYER: NONWOVEN | ASTM D 5261 | 20,000 m ² | 200 g/m ² |
| CARRIER LAYER: WOVEN | ASTM D 5261 | 20,000 m ² | 100 g/m ² |
| POLYMERIC MEMBRANE 0.2mm | ASTM D 5261 | 20,000 m ² | 200 g/m ² |
| BENTONITE | | | |
| MASS PER UNIT AREA ⁽¹⁾ | ASTM D 5993 | 4,000 m ² | 3700 g/m ² |
| FREE SWELL | ASTM D 5890 | 50 t | 24 ml/2g |
| FLUID LOSS | ASTM D 5891 | 50 t | 18 ml ** |
| MONTMORILLONITE CONTENT | XRD | every batch | 80% |
| CARBONATES CONTENT | XRD | every batch | 1-2 % ** |
| GCL | | | |
| GCL MASS PER UNIT AREA ⁽¹⁾ | ASTM D 5993 | 4,000 m ² | 4200 g/m ² |
| THICKNESS | EN ISO 9863-1 | 4,000 m ² | 5.7 mm |
| TENSILE STRENGTH | ASTM D 6768 | 20,000 m ² | 11.0 kN/m |
| PEEL STRENGTH | ASTM D 6496 | 20,000 m ² | 600 N/m |
| STATIC PUNCTURE RESISTANCE (CBR) | ASTM D 6241 | 20,000 m ² | 2.1 kN |
| GCL HYDRAULIC CONDUCTIVITY | ASTM D 5887 | weekly | No flow |
| GCL INDEX FLUX | ASTM D 5887 | weekly | No flow |
| ROLL DIMENSIONS | | | 40.0m x 5.00m (200m ²) |

⁽¹⁾ reported at 0% moisture content. All values at 95% confidence level. All values are MARV, except those marked with ** which are MaxARV.

APPLICATION:

- Water reservoirs, dams and river embankments
- Liquid waste disposals sites, transfer stations, secondary containment
- Transport infrastructure
- Canals
- Solid waste storage and disposal sites

ADVANTAGES:

- Self-healing
- Robust construction
- Limited preparation work
- Easy and quick installation
- Long performance

INSTALLATION:

- Unrolled on smooth and compacted subgrade
- Subsequent panels lapped 300mm at leading edges

PACKAGING:

BentoSure is produced in 5m wide x 40m long panels, rolled onto a 100mm internal diameter central core, and protected with a plastic sleeve. Other panel sizes are available on request.

STORAGE:

Provided the rolls are kept inside their protective plastic sleeves, further on-site protection is not required.

SAFETY INSTRUCTION:

There are no special safety measures required for the handling and installation of BentoSure, other than those normally implemented on construction sites. Refer to the installation guide for more information.

ISO 9001

BUREAU VERITAS
Certification



This product has been manufactured under the controls established by Bureau Veritas certification approved management system that conforms with ISO 9001:2015. Bureau Veritas Certification certificate number NZ 001784-1

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