Alberta Government

Product ID: 8150-8-1
Initiation Date: February 5, 2021
Revision Date: February 22, 2022
Expiry Date: February 2025

Product Evaluation

RE: Review of CETCO Bentomat Geosynthetic Clay Liner

PRODUCT
CETCO Bentomat Geosynthetic Clay Liner is manufactured by Colloid Environmental Technologies Company (CETCO) located in Hoffman Estates, Illinois, USA and it is distributed in Alberta by Western GeoSystems Cor located in Golden, Colorado, USA. Website: https://www.mineralstech.com/

VENDOR CLAIMS AND INFORMATION

CLAIMS
CETCO Bentomat Geosynthetic Clay Liner is a sodium bentonite-based GCL which provides an excellent hydraulic barrier in applications where leachate in direct contact with the GCL is relatively non-aggressive, or in composite lining applications where the GCL is overlain by a thermally welded geomembrane and hydrates from uptake of innocuous moisture from the subgrade.

DESCRIPTION
CETCO Bentomat Geosynthetic Clay Liner is available in a non-reinforced configuration to allow maximum value for your site. It is also available with the industry leading highest needle-punch density providing maximum performance when high internal shear strength is needed.

POTENTIAL USAGE
CETCO Bentomat Geosynthetic Clay Liner (GCL) can be used in lieu of, or in conjunction with, a compacted clay liner in liquid and waste containment applications.

STANDARDS

ASTM D5261	Measuring Mass per Unit Area of Geotextiles
ASTM D5993	Measuring Mass per Unit Area of Geosynthetic Clay Liners
ASTM D2216	Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D5890	Swell Index of Clay Mineral Component of Geosynthetic Clay Liners
ASTM D5891	Fluid Loss of Clay Component of Geosynthetic Clay Liners
ASTM D1505	Density of Plastics by the Density-Gradient Technique
ASTM D5199	Measuring the Nominal Thickness of Geosynthetics
ASTM D882	Tensile Properties of Thin Plastic Sheeting
ASTM D6768	Tensile Strength of Geosynthetic Clay Liners
ASTM D6496	Determining Average Bonding Peel Strength between Top and Bottom Layers of Needle-Punched Geosynthetic Clay Liners
ASTM D5887	Measurement of Index Flux through Saturated Geosynthetic Clay Liner Specimens Using a Flexible Wall Permeameter
ASTM D6243	Determining the Internal and Interface Shear Strength of Geosynthetic Clay Liner by the Direct Shear Method

ALBERTA TRANSPORTATION COMMENTS

EXPERIENCE
Alberta Transportation has no experience with this product

APPLICABLE STANDARDS
Alberta Transportation does not have a standard for Geosynthetic Clay Liner.

RECOMMENDATIONS
CETCO Bentomat Geosynthetic Clay Liner be listed as a Potential Product under Alberta Transportation Products List, Geosynthetics – Geosynthetic Clay Liner – Proprietary, based on the information provided. Final acceptance as a proven product will be based on field performance.

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RESTRICTIONS ON USE
Caveat: Recommendation from consultant will be required for the use of this product in Water Management Projects.

TRIAL PROJECTS

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