

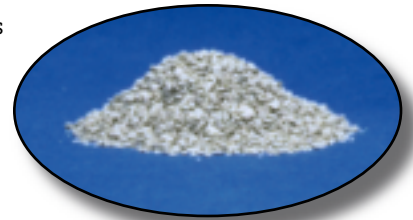
Volclay soil sealants are granular sodium bentonite products manufactured by CETCO that provide economical low permeability soil liners for a wide variety of containment applications.

Liners | Caps | Slurry Trenching | Pond Sealing



FUNCTION

When Volclay is mixed with soil and hydrated, the Volclay expands to fifteen times its volume forming a mechanical bond with surrounding soils and filling the voids between the soil particles. This creates a barrier that effectively stops further seepage through the soil, and in addition decreases the permeability of soil several orders of magnitude. Bentonite can withstand desiccation, hydration and freeze-thaw cycling without losing its sealing ability.



APPLICATIONS

Volclay soil sealants can be utilized for a number of different applications including reservoirs, secondary containment, agricultural waste containment, ponds, slurry trenching, or wastewater treatment lagoons just to name a few. Volclay can be used in fresh water lakes or contaminated wastewater lagoons. The Volclay soil mixture should be protected by a cover layer where there is erosion potential from run-off, inlet flow, aerators or other factors.

FEATURES AND BENEFITS

- High swelling capacity – only a small percentage of Volclay is needed reducing the required applications rate.
- Product variety – allows for several different methods of application, allowing customers a more diverse choice of use.
- Access to the largest bentonite reserves in the world – CETCO is able to provide the most consistent and highest quality soil sealants available.
- Offering treated bentonites that perform well in environments with contaminated waters that contain dissolved salt, acid or alkali – gives a solution to these typical conditions that decrease untreated bentonites swelling and sealing capabilities.
- Three processing locations across the United States – shipping costs are reduced significantly.



Products

PRODUCT SELECTIONS

Volclay CG-50 is a high-swelling, low dust, granular sodium bentonite used for soil-bentonite liner applications where it is necessary to minimize dust generation. CG-50 is designed for general sealing applications that do not require contamination resistance. Applications include ponds, lagoons, and tank farms.

Volclay CP-200 is a high-swelling powder grade sodium bentonite used for soil-bentonite liners where thorough mixing is required. CP-200 is designed for general sealing applications that require limited contamination resistance. Applications include landfill liners, landfill caps, ponds, lagoons, and tank farms. Volclay CP-200 meets API Specification 13A, making it useful for slurry trenching.

Volclay CC-8 (Crumbles) is a high-swelling, large coarse-granular sodium bentonite used to help seal leaks in existing ponds, lagoons, tank farms and reservoirs. It is sprinkled over the water, where it sinks to the bottom and decreases the water leakage.

Volclay TG-50 is a chemically treated, high-swelling, granular sodium bentonite used for soil-bentonite liners where high-contamination exists that can subject untreated clays to degradation. Applications include landfill liners, landfill caps, wastewater lagoons and industrial waste lagoons.

Volclay SG-40 is a polymer treated high-swelling granular sodium bentonite for improved efficiency in soil-bentonite liners for water containment applications. Because SG-40 application rates are lower than untreated bentonite, it provides greater economy than untreated bentonite.

PRODUCT	CP-200	CG-50	CC-8	TG-50	SG-40
DESCRIPTION	Powder bentonite meets API 13A	Untreated granular particles	Coarse granular bentonite	Chemically treated bentonite	Polymer treated bentonite
PRIMARY APPLICATIONS	Landfill liners and caps; slurry walls	General purpose sealant for any application	"Sprinkle method" for leaking ponds	Containment of contaminated liquids	Freshwater Ponds
FREE SWELL	16 ml/2g	24 ml/2g	24 ml/2g	24 ml/2g	24 ml/2g
BARREL YIELD	90 min.	N/A	N/A	N/A	N/A
MOISTURE CONTENT	12% max.	12% max.	12% max.	12% max.	12% max.
PARTICLE SIZE*	70% min - #200	5% max. + #10 15% max - #200	20% typ. + #8 20% typ. - #20	5% max. + #10 15% max. - #200	5% max. + #10 15% max. - #200
DRY BULK DENSITY	54 lbs/ft ³	65 lbs/ft ³	65 lbs/ft ³	65 lbs/ft ³	65 lbs/ft ³

* + = retained on
- = passing

The above values, unless otherwise specified, are the minimum acceptable average test results for any roll based on the specified test methods and do not refer to an individual test specimen. The data provided is for informational purposes only and is not intended as a warranty or guarantee. Values are subject to change without notice. Rev. 4/04