



# PondLock™ Sodium Bentonite

Premium High-Swelling Clay Liner for Permanent Pond Sealing

<b>30 mL</b> SWELL INDEX	<b>15×</b> EXPANSION RATE	<b>NRCS</b> 520 & 521C CERTIFIED	<b>100%</b> NATURAL & SAFE
-----------------------------	------------------------------	-------------------------------------	-------------------------------

## Why Choose PondLock™?

- ✓ **Superior Swelling:** Laboratory-tested 30 mL swell index creates exceptional sealing capability
- ✓ **Proven Performance:** Exceeds NRCS 520 & 521C requirements ( $\geq 22$  mL free swell per ASTM D5890)
- ✓ **Natural Wyoming Source:** Pure sodium montmorillonite bentonite with consistent quality
- ✓ **Versatile Application:** Mixed, blanket/cap, and keyway trench methods
- ✓ **Environmentally Safe:** Non-toxic, safe for fish, wildlife, livestock, and irrigation

## Key Features

Feature	PondLock™ Specification
Swell Index (ASTM D5890)	<b>30 mL</b>
Typical Expansion	15x dry volume
Primary Mineral	Sodium Montmorillonite
Permeability	Very Low (hydrated)
Application Methods	Mixed, Blanket, Keyway

## Know the Difference

Characteristic	PondLock™ Sodium Bentonite	Calcium Bentonite
Swell Index	<b>30 mL</b>	<b>12 mL</b>
Water Behavior	<b>Forms gel barrier</b>	Slight absorption
Primary Use	<b>Pond sealing</b>	Adsorbents
Long-term Performance	<b>Permanent seal</b>	Temporary

## Proven Applications

- New pond construction
- Existing pond leak repair
- Agricultural water storage
- Lagoon/wastewater liners
- Canal and ditch sealing
- Dam keyway trenches
- Stormwater retention
- Wildlife habitat ponds
- Inlet/outlet leak repair

### PondLock™ vs. Texas Calcium Bentonite - Real World Application

For equivalent sealing performance at 4 lbs/sq ft of PondLock™:

- PondLock™ Sodium Bentonite: **4 lbs/sq ft** (30 mL swell index)
- Texas Calcium Bentonite Required: **~12 lbs/sq ft** (12 mL typical swell)

To achieve the same sealing effectiveness as PondLock™, you would need approximately **3 times more** calcium bentonite - making PondLock™ the clear economical and practical choice.

## Coverage & Design

### Blanket/Cap Method

Spread evenly, hydrate, compact

#### General Application Rates:

- Clayey/Silty soils: 2 lbs/ft<sup>2</sup>
- Sandy soils: 4 lbs/ft<sup>2</sup>
- Gravelly soils: 5+ lbs/ft<sup>2</sup>

*For engineered solutions (wastewater lagoons, structural dams), laboratory soil analysis is required to determine exact application rates.*

### Mix-In Method

Till into top 6-12", moisture-condition, compact to 95%+ of standard Proctor density

### Keyway Trench

Cut trench to competent soil, place compacted bentonite-soil mix (30% bentonite, 70% native soil)

### Simple Install Checklist

1. Prep subgrade: Strip organics, muck, sharp debris
2. Place: Spread recommended dose evenly
3. Add Moisture & Till to target depth
4. Compact: 2-4 passes with vibratory roller
5. Protect: Apply soil cover, fill gradually

## Competitive Edge

- ✓ Verified sodium bentonite (not calcium "activated" clay)
- ✓ Meets NRCS 520 & 521C sodium bentonite criteria
- ✓ ASTM D5890 free-swell expectations exceeded
- ✓ Backed by Natural Waterscapes expertise and support

### NRCS 520 & 521C Compliance

#### PondLock™ meets and exceeds all NRCS requirements:

- NRCS 520 (Compacted Soil Liners) - PondLock™ suitable for soil-bentonite mixtures
- NRCS 521C (Bentonite Treatment) - Free swell requirement  $\geq 22$  mL - **PondLock™ delivers 30 mL**
- Minimum finished compacted liner thickness: 6 inches
- Protection against desiccation and erosion required

## Package Sizes

- ✓ **3,000-lb Super Sack**  
Maximum value for large projects
- ✓ **2,000-lb Super Sack**  
Standard bulk application
- ✓ **45-lb Bag**  
Convenient handling
- ✓ **25-lb Bag**  
Easy spot repairs

*Palletized quantities and freight delivery available. Bulk sacks equipped with bottom drawstring discharge port and four top lifting loops for secure, stable handling.*



*PondLock™ Bulk Sacks with Lifting Loops*

## Specifications (Short-Form)

- **Product:** PondLock™ Sodium Bentonite
- **ASTM:** D5890 Free Swell  $\geq 22$  mL (delivers 30 mL)
- **NRCS 520:** Suitable for soil-bentonite compacted liners
- **NRCS 521C:** Exceeds bentonite treatment standards
- **Minimum thickness:** 6-inch finished compacted liner