

# Posi-Shell® Cover System

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## PRODUCTS/ EQUIPMENT

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Coverage

Equipment

MSDS

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Test Data

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## DESCRIPTION OF POSI-SHELL®

Posi-Shell® is a fibrous, stucco-like, 'cementitious' product that is solving problems in a variety of industries and applications.

Simple to mix and easy to use, the Posi-Shell® Cover System consists of 3 materials; a liquid base, a mineral binder, and Posi-Pak® fibers.

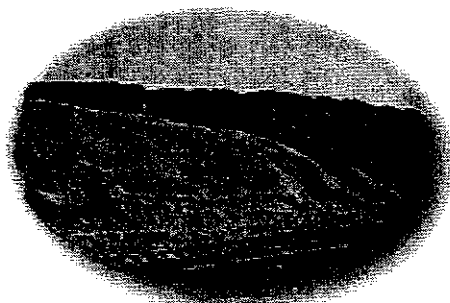
'Spray-on' application is done using specially designed application equipment that provides quick and effective cover on smooth or rough surfaces. You can easily apply Posi-Shell® on steep slopes, soil piles, and earthen berms. Using the deck-mounted spray tower, you can work up to 150 feet from the applicator. With extension hoses, this distance can be increased up to 1,000 feet!

After placement, Posi-Shell® forms a durable, non-flammable crust that resists wind and water erosion--offering months of protection. When Portland cement blends are used as the mineral binder, protection is extended for a year or more!

The benefits? A protective cover system certified to be **non-flammable**, **non-fuel contributing**, and **non-smoke producing**, that meets ASTM E-1354 standards.

Posi-Shell® has a hydraulic conductivity less than  $1 \times 10^{-5}$  cm/sec as measured in a flexible wall permeameter.

The Posi-Shell® Application equipment is designed to meet your needs for coverage and efficiency. Whether it's a PSA-1200, the larger PSA-2000 or the **powerful** self-propelled PSA-3500--we're **Covering Your Needs!**



1-800-800-7671

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**POSI-SHELL® COVERAGE**

**Recommendations**

<b>Short Term Coverage</b>	
<ul style="list-style-type: none"> <li>• Daily Cover</li> <li>• Litter Control</li> <li>• Dust Control</li> </ul>	<b>6-8 sq ft per gallon</b>
<b>Medium Term Coverage</b>	
<ul style="list-style-type: none"> <li>• Intermediate Cover</li> <li>• Erosion Control</li> <li>• Odor Control</li> </ul>	<b>4-5 sq. ft per gallon</b>
<b>Long Term Coverage</b>	
<ul style="list-style-type: none"> <li>• Erosion Control</li> <li>• Compost Cover</li> <li>• Cinder Pile Cover</li> </ul>	<b>3-4 sq. ft per gallon</b>

Coverage area varies with the load size, the mixture of slurry solids, and amount of product applied to a given area.

Posi-Shell Cover can be applied in subfreezing temperatures. The frozen coating cures, after thawing conditions prevail. Durability is somewhat less than coatings cured at temperatures above 32 degrees F.

Application is not recommended in heavy rainfall.



**SOIL & MATERIAL TESTING, INC.**  
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HYDRAULIC CONDUCTIVITY TEST DATA

Project Name: LANDFILL SERVICE CORP. POSI-SHELL  
 Client: Landfill Technologies, Inc.  
 PO Box 519  
 West Sand Lake, New York 12196

SMT Project No.: 80799

Sample Description: Visual Description:  
 Gray Cementitious Material  
 Sample #2  
 Undisturbed Shelby Tube Specimen:

Date Sampled: 10/23/95  
 Date Reported: 10/31/95

Date Tested: 10/27/95 RW  
 Reviewed By: REV

Test Standard: ASTM D 5084  
 Test By: DW

Test Description: Falling Head/Rising  
 tail Flexible Wall Permeability

RESULTS:

Initial Specimen  
 Properties

Length == 12.36 cm  
 Diameter = 7.16 cm  
 Moisture Content = 60.1%  
 Wet Density = 95.5 pcf  
 Dry Density = 59.7 pcf

Test  
 Conditions

Back Pressure = 66.0 psi  
 Cell Pressure = 70.0 psi  
 Hydraulic Gradient = 10  
 Permeant Liquid: Air-less  
 Tap Water

Remarks:

Hydraulic Conductivity:  $k_{20} = 5.8 \times 10^{-6}$  cm/sec

SOIL & MATERIAL TESTING, INC.

Thomas M. Kenney  
 Thomas M. Kenney



**LANDFILL SERVICE  
CORPORATION**

**MATERIAL SAFETY DATA SHEET**

OSHA 29CFR 1910.1200

Date of Preparation: September 1997

**Section I - Identity**

Distributor's name and address: Landfill Service Corporation  
2183 Pennsylvania Avenue  
Apalachin, NY 13732

Emergency telephone number: (607) 625-3050

Chemical name and synonyms: Aqueous alkaline slurry

Trade names and synonyms: Posi-Shell Synthetic Cover

**Section II - Chemical Data**

Chemical family: N/A

Formula: The major constituent, mineral binder, is a nonspecific pozzolonic material containing variable quantities of the following mineral compounds:  $\text{CaCO}_3$ ,  $\text{CaO}$ ,  $\text{SiO}_2$ ,  $\text{Fe}_2\text{O}_3$ ,  $\text{Al}_2\text{O}_3$ ,  $\text{K}_2\text{SO}_4$ ,  $\text{Na}_2\text{SO}_4$ . Other compounds may also be present. The slurry also contains cellulose fibers, P.E.T. fibers, water (or landfill leachate), and iron oxide coloring agent.

Hazardous mixtures of other liquids, solids or gases: N/A

**Section III - Physical Data**

Boiling Point (F) (Aqueous Portion): 212

Vapor Pressure (mm Hg): N/A

Vapor Density (Air=1): N/A

Specific Gravity ( $\text{H}_2\text{O}=1$ ): 1.87

Percent Volatile by Volume (%): N/A

Evaporation Rate: N/A

Solubility in Water: N/A

Appearance and Odor: Brown viscid liquid slurry with a smell similar to wet portland cement.

## Section IV - Fire and Explosion Hazard Data

Nonexplosive, nonflammable.

## Section V - Health Hazard Data

Threshold Limit Value: N/A

Effects of Overexposure:

Acute: Can dry skin and cause alkali burns. May cause eye and skin irritation to those with sensitive skin.

Chronic: Non observed if properly handled. If cured material is pulverized and dispersed, fugitive dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis.

Emergency and First Aid Procedures: Irrigate eyes with water. Wash exposed skin areas with soap and water.

## Section VI - Reactivity Data

Stability:	Product is stable.
Incompatibility (materials to avoid):	None known.
Hazardous Decomposition Products:	None known.
Hazardous Polymerization:	Will not occur.

## Section VII - Spill Procedures

Steps to be taken in case material is spilled: Handle as normal solid waste.

Disposal method: Material can be disposed of as common waste in approved landfill.

## Section VIII - Special Protection Information

Respiratory Protection: A NIOSH approved respirator is recommended during mixing procedure.

Ventilation: Local exhaust may be used.

Skin Protection: Avoid skin contact with wet slurry. Wear rubber or plastic gloves.

Eye Protection: Use of tight-fitting goggles is recommended.

Other Protective Equipment: Use barrier creams; wear coveralls; shower with soap and water.

Other Precautions: No special precautions need to be taken in handling and storing.