

The Water-Lok Story

The waters of prehistoric lakes were home to single-cell creatures called diatoms. As diatoms died, their tiny skeletons-rich in silica-sank to the bottom of the lakes.

Volcanoes spewed millions of tons of alumina-rich ash into the sky. Some of the ash fell on the same lakes where the diatoms lived and died. Over millions of years, alternating layers of diatom skeletons and volcanic ash built up in the lake beds. Eventually the lakes became dry land.

The Romans 2000 years ago discovered some of these deposits surrounding Mount Vesuvius near a town called Pozzouli, so they called the material "pozzolan". They found that pozzolan could improve the quality of concrete, so they used it to construct roads, aqueducts, and buildings. Many of these projects still stand, 23 centuries later. Pozzolan is still used in concrete today.

Pozzolan has a miraculous ability to hold water. A quantity of pozzolan will retain its weight in water.

“This ability to hold water makes Water-Lok critical in agriculture”

While about 72% of the Earth's surface is covered by water, 97% of the water is salt or brackish water that cannot be used by plants, animals, people, or industry. Only 3% of the water is fresh and much of that is not in the right place at the right time for mankind to avoid droughts and water shortages.

So we call it Water-Lok. This ability to hold water makes Water-Lok critical in agriculture.

While about 72% of the Earth's surface is covered by



Pozzolan is composed of silica-rich microscopic diatom skeletons...



...and alumina-rich volcanic ash.



Romans used pozzolan in concrete which lasted 23 centuries.



Water-Lok

Water-Lok Test Results

Water-Lok helps retain water in soil. Water-Lok reduces evaporation and improves percolation so that the water stays at root level where plants can use it efficiently.

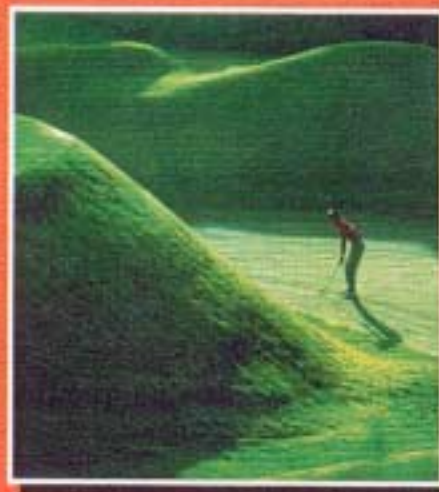
Water-Lok:

- reduces the percolation rate of sand.
- increases the percolation rate of clay.
- reduces evaporation.

Water-Lok:

- is among the lowest-priced products in its field.
- is easily applied with standard hand tools and ordinary fertilizer spreaders.
- contains no heavy metals.
- does not attract or retain salts.
- has high soil suction (capillary action) that can draw moisture up slopes.
- holds moisture on hills, reducing run-off.
- has high conduit effect which dissipates water over the entire area to which the product has been applied.
- can reduce, or even eliminate, puddling.
- does not compact. Water-Lok aerates and keeps soil, especially clay, loose and pliable for healthy root growth.
- will not expand and push plants out of the soil or choke their roots.
- will not float.
- helps to stabilize soil.
- increases the reservoir capacity of soil.
- can absorb in excess of 100% of its dry weight in moisture.
- is inert. It is harmless to turf, plants, livestock, and people. Lawns treated with Water-Lok are safe for children and pets.
- is effective against brown spots and thatching when used on lawns.
- is non-abrasive. It will not harm roots in high traffic areas. It will not damage mower blades.
- will not deteriorate or decompose. A single application of Water-Lok is guaranteed for 5 years.

Water-Lok's pore characteristics and silica content improve the exchange of moisture, nutrients, and oxygen in the growing medium.



Water-Lok Test Sites

City Scape

Riyadh, Saudi Arabia

Riyadh Intercontinental Golf Club

Riyadh, Saudi Arabia

WestPac Utilities Division

*Sierra Pacific Power Company
Reno, Nevada*

Agri-Systems

Tomball, Texas

Applied Bio-Systems

Davis, California

University of Nevada

Reno, Nevada

University of California

Davis, California

Turf Diagnostic and Design

Olathne, Kansas

Lahontan Valley Water District

Lake Tahoe

Las Vegas Valley Water District

Demonstration Gardens

Las Vegas, Nevada

City of Reno,

Nevada

City of Sparks,

Nevada

Nevada Department of Transportation

Nevada

Sierra Environmental Monitoring, Inc.

Sparks, Nevada

Harvey Laboratories, Inc.

Agricultural Chemists and Consultants

Patterson, California

Water Equipment Technology, Inc.

Advanced Irrigation Systems

Carson City, Nevada

Northwest Testing Laboratories

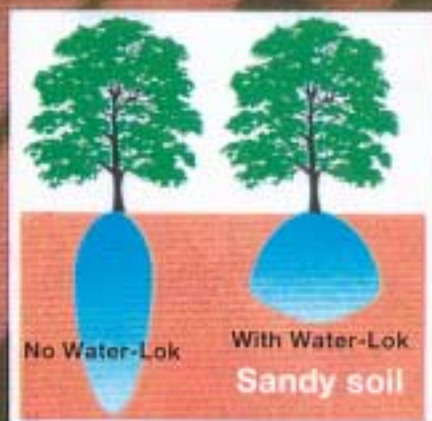
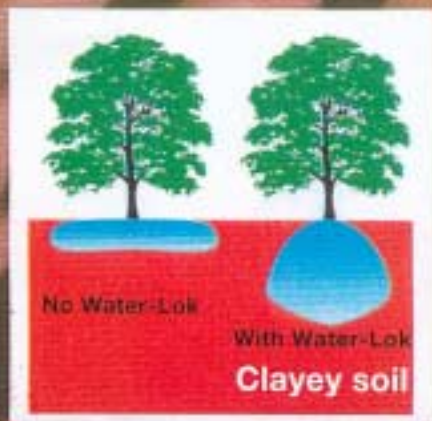
Portland, Oregon



Amargosa Farms, Las Vegas



Nursery, Saudi Arabia



Particles of Water-Lok function as tiny reservoirs that plants can draw water from as they need it. The availability of this additional moisture allows longer intervals between irrigation.

Water-Lok Benefits

Irrigation of crops, lawns, and golf courses can be **reduced by 50%**

Water consumption is reduced 50%.

Save on water.

Water reserves are effectively doubled.

Save on exploration.

Labor is reduced.

Save on labor.

The use of Water-Lok requires less fertilizer and less peat moss.

Save on fertilizer, peat moss, and labor.

Power consumption is reduced.

Save on energy.

Wear on irrigation systems is reduced.

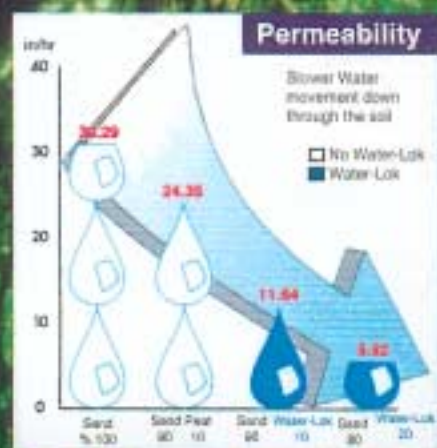
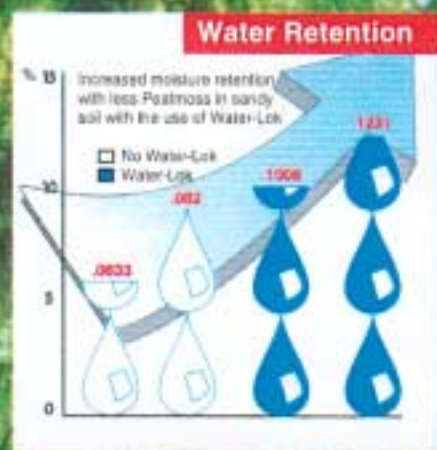
Save on replacement.

Salt build-up is reduced. Fewer plants die.

Save on replacement.

Plants grown with Water-Lok germinate sooner, grow faster.

Get to market faster.



Increase profits.

The Disadvantages of Other Water-Retention Products

Competing products:

- decompose naturally or when exposed to fertilizer or other agricultural chemicals.
- are light enough to float out of the soil or blow away.
- attract or hold salts or other toxic substances.
- are so hard and abrasive that they can damage delicate roots when applied in high traffic areas.
- are much more expensive than Water-Lok.

“Water-Lok is NOT A POLYMER”

It is a natural mineral consisting of approximately 70.5% silica, 17% aluminium oxide, and 6.7% iron oxide.