

# Faster drainage. Firmer surfaces. Healthier turf.

## Dry down your soil

Excess moisture in a soil profile can cause problems affecting turf quality, turf health and playability. Soft playing surfaces in sports turf are a frequent complaint by players impacted by water-saturated soils.

Getting excess moisture out of the root zone and keeping playing conditions firm requires good water management, accepted physical soil maintenance practices, and often the use of an effective soil penetrant.

## Terafirm

**Terafirm** is a non-phytotoxic soil penetrant developed to promote accelerated water movement away from the soil surface. This is accomplished by reducing the water's surface tension and facilitating downward water movement.

Although no chemical penetrant can in itself alter the physical properties of soil that determine drainage rates, **Terafirm** will help get the water out as quickly as the soil physical properties allow. Formulated solely to facilitate downward water movement, **Terafirm** will not contribute to excess water holding.

Regular use of **Terafirm** offers the turf professional an effective tool to help maintain drier and healthier soil surface conditions.

## Benefits to soil and turf

- Reduces the surface tension of water
- Facilitates faster soil dry-down, allowing faster access to play, carts, and equipment
- Promotes downward water movement, away from the soil surface
- Reduces puddling
- Helps to prevent anaerobic soil conditions

*Keeping excess water from prolonged retention in soil pores helps maintain soil porosity and air exchange and contributes to healthier turf.*

## What's in a name?

**Terafirm** comes from the Latin *terra firma*, meaning "solid or firm earth," which is the goal of turf professionals trying to offer ideal playing surfaces and conditions.



**Terafirm**  
Soil Penetrant

*From the makers of TriCure Soil Surfactants*

# Terafirm Soil Penetrant

## When to use Terafirm

Optimizing soil moisture throughout the year is a key to successful turf management.

**Terafirm** can be used on a program basis during seasonal periods of heavy moisture and then replaced with a soil wetting agent during hot and dry months when moisture is limited. It can also be used as a spot treatment in advance of heavy rain.

**Terafirm** will not cause soils to hold additional water as many wetting agents do.

**Terafirm  
promotes**

- Faster soil drainage
- Aerobic soil conditions
- Healthier turf by opening up soil pore space
- Quicker access to play and turf maintenance equipment

## Key function: opening soil pores



*Control*



*Leading Penetrant*



*Terafirm*

As seen in research samples above, use of **Terafirm** contracts clay particles creating small crevices and opening pore space, allowing water to move down in the profile. This is a characteristic feature of **Terafirm**. Compare to control and a leading penetrant where contraction is insufficient to create uniform openings for drainage.

## Application Considerations

For maximum program effectiveness, **Terafirm** should be applied in advance of seasonal excess moisture. As a spot treatment, apply prior to periods of heavy rain.

	Rate	Application Schedule
Program Approach – Monthly	2-4 oz./1000 ft <sup>2</sup> (7-13 lt/ha)	Apply in advance of extended periods of heavy moisture on poorly draining areas monthly as long as conditions persist. Replace with a soil wetting agent during hot, dry months if moisture becomes limited.
Spot Treatment	2-4 oz./1000 ft <sup>2</sup> (7-13 lt/ha)	Spot treat prior to period of high moisture or heavy rainfall. Treat affected areas every 14 days until excessive moisture conditions subside.

Efficacy has shown to increase with multiple applications and continued use.