



For a healthy, greener turf

What is pHairway[®] (pronounced fair-way)

pHairway is a water treatment amendment that when added to irrigation water, can control the destructive dissolved salts and bicarbonates that are harmful to your turf.

Why should you use pHairway?

Almost all irrigation water contains dissolved salts. Some are beneficial such as calcium, magnesium, sulfate, and nitrate. Others such as sodium, chloride, and boron are examples of potentially toxic salt ingredients that must be carefully managed or avoided if possible. The third group, which interacts with and is usually present with the above salts, consists of carbonate, bicarbonate, and silicates. The addition of liquid phosphate materials such as 10-34-0 can also result in insoluble precipitates, that can reduce fertilizer efficiency.

The presence of these salts in both irrigation water and soil can cause destruction of soil structure and precipitation of insoluble salts in irrigation equipment. Often the most troublesome of the salt components found in or added to irrigation water is the carbonate-bicarbonate complex and phosphates and their resulting precipitates. Fortunately, these can be controlled with the addition of pHairway to the irrigation water.

Conversely, low salt irrigation sources may also pose problems because the absence of salts such as calcium can also cause soils to seal. For these reasons, surface and sprinkler irrigation water treatment with pHairway has been employed to lower the pH and reduce the problems associated with waters containing bicarbonate.

pHairway is an excellent choice for irrigation water treatment. It contains acid in a safer complex form

that provides a way of avoiding the use of dangerous mineral acids. It also makes it possible to effectively use acid in most turf applications while reducing hazards to personnel. Careful attention should be paid when metering pHairway into aluminum, cement, or transite irrigation systems. Any acidic material, including pHairway, can react with these systems if the pH of the treated water falls below 4.5. (see the complete pHairway manual for safety, handling and equipment recommendations, and spill response and clean-up procedure).

pHairway is a Patented Formulation

pHairway is a unique product resulting from a carefully controlled manufacturing process that combines urea and sulfuric acid. The resulting product is contaminant-free, and contains additives to control metal corrosion.

BENEFITS OF ADDING PHAIRWAY

- Destroys soil sealing alkalinity
- Liberates "tied-up" calcium and magnesium
- Eliminates induced sodium soil sealing
- Opens soil profile



Please Call 1-800-677-8097



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Who uses pHairway?

Golf course superintendents across the United States and even in Europe use pHairway. Whether your turf is in Las Vegas, Chicago, Dallas or Florida, pHairway can work for you--no matter how extreme your climate.

But don't just take our word for how great pHairway works on turf--read the following:

"The first time I used pHairway, I dropped the pH level down to 4.5 for 1-2 hours to flush the greens. The next day I saw phenomenal improvements. The turf was standing straighter and I didn't see a single puddle."

"I extended the use of pHairway from the greens to the fairways and saw the same dramatic improvements. It helps drain wet spots as well as infiltrate dry spots too."

"It's the number one thing we have done in 10 years, the number one additional improvement for a better quality turf."

John Gurke
Certified Golf Course Superintendent
Aurora Country Club

"It helped with dollar spot, and we noticed on the fairways that we have better water penetration. During the worst two months, July and August, with regular irrigation you can reap the benefits of the product. Since I've used the product, I've never used a wetting agent, which is a savings."

Rick Bowden
Golf Course Superintendent
Bob O Link Golf Club

"When the product came on the market, I was hesitant. But after using pHairway, I noticed drastic changes. It maintains the color of the turf

throughout the year, and even without a wetting agent I'm able to put the soil probe deeper than ever. The soil chemistry is better balanced after using pHairway consistently."

Mike Sauls
Golf Course Superintendent
Butler National

"Within a week I saw improvement. We used to have standing water, and we don't anymore once we started treating the water with pHairway. I'm also happy to use less wetting agents than before."

Ray Schmitz
Certified Golf Course Superintendent
Flossmoor Country Club

Product Specifications

Product: pHairway

Common Name: Monocarbamide dihydrogensulfate (MCDS) solution

Physical Properties⁽¹⁾:

Weight per gallon: 12.7
Crystallization temperature⁽²⁾: 42+/-3
Viscosity, cps: 49
Specific gravity: 1.52
Gallons per ton: 158
Color: Orange

Notes:

- (1) Unless otherwise stated, values are at 68 degrees F (20 degrees C) and 1 atm (760 mm Hg).
- (2) This product readily supercools and may not immediately crystallize at lower temperatures.