



Sodium-pHix™

Natural Gypsum Mineral



Sodium-pHix can be applied using a hydraulic seeder to help lower the salinity and increase the level of calcium in the soil.

Conditions Calcium Deficient or Saline Soils to Enhance Vegetation

ProPlus® Sodium-pHix™ is a natural gypsum mineral (calcium sulfate dihydrate) that lowers sodium levels in soil to enhance vegetation. After it is absorbed into the soil matrix through rain or irrigation water, Sodium-pHix increases the electrolyte concentration and provides calcium to create an ion exchange reaction with sodium. This process improves the soil's physical and chemical properties, controlling soil salinity and increasing calcium content.

Soluble, natural gypsum mineral is mined from an open pit quarry, crushed and processed into a fine granular ingredient. For use with hydroseeding or irrigation water applications, Sodium-pHix Hydro contains a suspending agent which allows for a more uniform distribution and faster release to improve plant establishment from seed.

High-purity Sodium-pHix is proven to:

- **Stay In Suspension**—A suspending agent ensures consistent mixing and uniform distribution of materials, even if they don't include a fiber mulch.
- **Improve Soil Structure**—Gypsum provides calcium, which can flocculate clay soils and reduce the swelling of smectite and open pore spaces, improving the penetration of water, air and roots into the soil.

- **Increase Water Infiltration**—As the soil structure improves, the water infiltration rate and hydraulic conductivity of the soil increases.
- **Prevent Crust Buildup**—Increasing the electrolyte concentration of the irrigation water can prevent depositional crusts on soil surfaces, which can adversely affect water infiltration rates and seed emergence and germination.
- **Enhance Moisture Retention**—Gypsum helps soil take in and retain moisture, which is especially critical in times of drought.
- **Improve Fertilization**—Supplies bio-available calcium and sulfur, elements vital to proper plant growth and development.
- **Enhance Nutrient Absorption**—Calcium regulates the balance of micronutrients in grass plants and optimizes the calcium-to-magnesium ratio in soils.
- **Be Environmentally Safe**—Sodium-pHix is inert and non-toxic as it is mined from the same gypsum deposit as food- and pharmaceutical-grade calcium sulfate.
- **Have a Positive Irrigation Effect**—Controlling soil salinity with appropriate water management is especially important because soils with high sodium content do not perform as well as calcium-rich soils.

Sodium-pHix™ Hydro Technical Data:

DRY WEIGHT GUARANTEED ANALYSIS

Calcium Sulfate Dihydrate	94.0%
Calcium Sulfate	72.0%
Calcium (Ca)	21.0%
Sulfur (S)	17.0%

TYPICAL PHYSICAL PROPERTIES

Appearance	White Powder
Specific Gravity	2.32
Bulk Density	51 lb/ft
Moh Hardness	2.0
pH	7.5

Rate of Dissolution

30 Seconds	97.4%
60 Seconds	100.0%

TYPICAL PARTICLE SIZE DISTRIBUTION

Particles Passing ASTM Sieves

50 Mesh	100.0%
100 Mesh	97.8%
200 Mesh	84.0%
325 Mesh	65.0%

*Certificate of Analysis and MSDS available upon request

DIRECTIONS FOR USE

Have a soil test performed by a reputable lab. Request tests: SAR, CEC% Sodium. Compare the results to the Application Rate chart below to calculate appropriate rate. Load all components in the hydro-seeder, add Sodium-pHix to the tank as you load your fertilizer, mix under normal agitation and apply to the soil surface.

TYPICAL APPLICATION RATES

(For best results, have your soil analyzed by a reliable testing laboratory.)

SAR ¹	CEC% Sodium ²	Sodium-pHix Hydro Particle Planting Rate
1.5 - 3	2 - 4%	500 lb/ac
3 - 4	4 - 6%	1000 lb/ac
4 - 5	6 - 8%	1500 lb/ac
5 - 6	8 - 10%	2000 lb/ac

¹ Sodium Absorption Ratio

² Sodium as % Base Saturation Cation Exchange Capacity

For maximum establishment effectiveness, apply Broadcast particle annual maintenance rate prior to planting and turn over "till" to approximately 1 - 2" soil depth; then apply Hydro particle rate when planting. For SAR and CEC% Sodium ranges higher than shown in the chart, please contact Profile Products.

PACKAGING

Bags: Net Weight – 50 lb, UV and weather-resistant plastic film.

Pallets: Weather-proof, stretch-wrapped with UV resistant pallet cover, 40 bags/pallet, 1 ton/pallet.



Green Design Engineering™ is a holistic approach that combines agronomic and engineering expertise with advanced technologies to provide cost-effective and earth-friendly solutions. Profile strives to deliver Green Design Engineering across our team of consulting professionals, innovative products and educational resources.



PS³ is a free, comprehensive 24/7 online resource you can use to design a project and select the right products that address both the physical and agronomic needs of your site. It will help you develop holistic, sustainable solutions for cost-effective erosion control, vegetation establishment and subsequent reductions in sediment and other pollutants from leaving disturbed sites. Because good plans start with the soil, PS³ offers free soil testing to ensure this critical step is considered. To access the site, design your project and take advantage of a free soil analysis, visit www.profileps3.com.



For technical information or distribution, please call 800-508-8681. For customer service, call 800-366-1180.

For warranty information, visit profileproducts.com.

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