

N-PHURIC 15/49 PHYSICAL AND CHEMICAL PROPERTIES

Common Name: Monocarbamide
dihydrogen
sulfate (MCDS)
solution

DOT Proper Shipping
Name: Corrosive Liquid,
N.O.S. (contains
monocarbamide
dihydrogen sulfate)

DOT Hazard Class¹: 8
Packing Group: III

Analysis: **Guarantee
(Wt.%):**

Total Nitrogen: 15.0
Water soluble organic nitrogen: 15.0
Each gallon contains 1.89 lbs. nitrogen

Equivalent Sulfuric Acid: 49.00
Sulfuric from sulfuric acid
equivalent: 16.00
Each gallon contains 6.19 lbs. of
Sulfuric acid equivalent from MCDS

Physical Properties:

Crystallization Temperature²: 42±3°F
Viscosity at 68°F: 110 centipoise
Specific Gravity at 68°F: 1.52
Pounds per Gallon at 68°F: 12.7
Gallons per Ton: 158

¹ Not regulated when shipped via ground
transportation (see 49 CFR 173.154(d))

² Product readily supercools and may not
immediately crystallize at lower temperatures



IND/AG

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N-PHURIC



ALFALFA

N-PHURIC
ONE CHOICE. MANY SOLUTIONS.™

ingredients for growth

INTRODUCTION

Alfalfa is a perennial grown throughout the western United States. N-pHURIC® and Phos-pHuric are excellent fertilizers with specific properties that make them ideal for use on alfalfa. N-pHURIC is a unique acid fertilizer manufactured by combining urea and sulfuric acid in a carefully controlled patented process. Phos-pHuric (7.5-26-0-85, 10-16-0-11 S) is a combination of N-pHURIC and liquid phosphorus fertilizer. See manual for mixing details.

N-pHURIC or Phos-pHuric can:

- Supply N, P and S to improve yield and quality
- Reduce soil crusting for improved emergence and increased stands
- Neutralize bicarbonate in irrigation water to improve water penetration and increase irrigation efficiency
- Lower soil pH and increase availability of phosphorus and micronutrients
- Be applied as needed throughout the growing season
- Be applied with many common contact and residual herbicides

**N-pHURIC is
an excellent
alfalfa fertilizer.**

PRE-PLANT AND STAND ESTABLISHMENT

Broadcast and incorporate N-pHURIC or Phos-pHuric prior to seeding as a pop-up nitrogen, sulfur and phosphorus source. You also may apply N-pHURIC or Phos-pHuric through the irrigation water either pre- or post-plant.

**N-pHURIC and Phos-pHuric
may be applied in the
irrigation water at any time
during the growing season.**

IRRIGATION APPLICATIONS

Water run applications during the growing season help ensure good water penetration by reducing bicarbonate levels in water. N-pHURIC and Phos-pHuric may be applied in irrigation water any time during the growing season. A water sample should be taken and a demand curve developed to ensure that the proper rate is being applied. Ask your fertilizer dealer or N-pHURIC representative for details.

**N-pHURIC can increase
the availability of
phosphorus and
micronutrients.**

SPRAY APPLICATIONS – SPRING AND SUMMER

These materials may be broadcast over the top of established alfalfa in California and Arizona (stand must be at least 12 months old and have been cut twice). If sprayed during the growing season, applications should be made immediately after cutting. A delay of about 10 days or more should be expected as a burn back of existing green foliage will occur.

SPRAY APPLICATIONS – DORMANT

When used in the dormant period, these materials may be combined with selected pre-emergent and post-emergent herbicides as part of a weed and feed program for alfalfa.

RATES

Water application: Best determined by obtaining a demand curve from your fertilizer dealer. Apply sufficient N-pHURIC to reduce the pH to 6.0-6.5 to obtain the best results. Spray applications: 20 to 25 gallons of either material with 10 to 20 gallons of water and 0.25 percent to 0.50 percent of a non-ionic surfactant can be added if used with herbicides. Thorough mixing of water and N-pHURIC or Phos-pHuric are essential for optimum distribution.

THINGS TO REMEMBER

1. Irrigation lines should be flushed at the end of the application when applying N-pHURIC in irrigation water.
2. Reducing water pH below 6.0 will result in damage to irrigation system components constructed of materials sensitive to acids.
3. To insure proper mixing, a stinger should be used at the point of injection.
4. All spray and irrigation equipment should be compatible with N-pHURIC. Refer to the equipment sections of the N-pHURIC manual.

Storage, handling, application and irrigation equipment can be damaged by N-pHURIC if it is not constructed of the proper material. Consult the N-pHURIC reference manual or your fertilizer dealer before applying N-pHURIC.

