

# UREA

Spray Grade 46-00-00

Water Soluble Fertilizer

## GUARANTEED ANALYSIS

Total Nitrogen (N) . . . . . 46.00%  
46% Urea Nitrogen

Derived From: Urea

**F1958**

## GENERAL INFORMATION

Plants need balanced nutrition to THRIVE, just like people. One of the important nutrients for plant growth is Nitrogen (N), especially for turf grass. Variation in available nitrogen for plant use determines the greenness of the leaves, ability of the plant to recover from damage and stress, and the quantity of clippings the grass produces. Nitrogen affects grass color, root and shoot growth, resistance to disease and drought tolerance of the plant.

## RECOGNIZING NITROGEN DEFICIENCIES

Nitrogen is a mobile element and easily leached to lower soil levels. When it is deficient, or lacking in the soil, the proteins of older leaves are converted to nitrogen which is then transported to the younger leaves. Older leaves then become light green, then yellow, and finally a copper yellow before dying.

The most sensitive and accurate measure of available nitrogen in the plant is obtained by a tissue test. In this test, plant tissue is sampled and analyzed either in a simple field test or in the laboratory. For turf, the quantity of clippings is the second most accurate measure of nitrogen availability.

## UREA STORAGE

Urea is neither combustible nor explosive. It can be stored safely with no loss of quality under normal circumstances. Urea should be stored in a dry area, away from any moisture in its original packaging or in a closed container.

## DIRECTIONS FOR USE

THRIVE Water Soluble Urea is produced for maximum water solubility. It is ideal for use in solutions, suspensions, fertigation, and foliar applications. The recommended application rate is provided as a general guide. For best results, contact a trained soil specialist for the allowable application rate of this product.

## DRY RATE OF PRODUCT

Desired Nitrogen	Lbs. To Apply Per Acre	Lbs. To Apply Per 1000 Sq. Ft.	1 Ton of Product Covers	1 Bag of Product Covers
1.50 Lb(s).	142.01	3.26	14.08 Acre(s)	15,337 Sq. Ft.
1.00 Lb(s).	94.53	2.17	21.16 Acre(s)	23,041 Sq. Ft.
0.75 Lb(s).	71.00	1.63	28.17 Acre(s)	30,675 Sq. Ft.
0.50 Lb(s).	47.48	1.09	42.12 Acre(s)	45,872 Sq. Ft.
Product Weight: 47 Lbs./Cu.Ft.			SGN Size: 25	

Recommended applications are at the rate of one pound of nitrogen per 1,000 Sq. Ft. Actual rates and timing of applications will vary with weather, soil and turf conditions.

## PROPERTIES OF UREA SOLUTION (per 100 lbs. of solution)

Desired % Nitrogen Solution	Lbs. Urea per CWT	Lbs. H <sub>2</sub> O at 60° F per CWT	Gal H <sub>2</sub> O at 60°F	Salt Out Temp
10%	21.74	78.26	9.39	>15°F
11%	23.92	76.08	9.13	>15°F
12%	26.08	73.92	8.87	>15°F
13%	28.26	71.74	8.61	>15°F
14%	30.43	69.57	8.34	>15°F
15%	32.61	67.39	8.08	>15°F

## FACTORS AFFECTING SOLUBILITY

**Product Concentration** - The more urea added to water the less it will dissolve. At normal atmospheric temperatures, approximately 1 lb. of urea can be dissolved in 1 lb. of water.

**Water Temperatures** - The higher the water temperature, the higher the solubility of Urea. Urea solutions will tend to salt out as temperature decreases.

**Agitation** - Speed of dissolution increases with agitation. Urea should be slowly mixed into turbulent water and not allowed to collect on the bottom of the mixing tank.

## PRECAUTIONS

Determine compatibility with other fertilizers and/or pesticides by use of jar test before tank mixing.

**NOTE:** For fertilizer application rates suitable for your geographical area or the maximum allowable non-nutrient application rates per acre, consult a trained soil specialist (local horticulturist) or contact the manufacturer or distributor.

For Golf Courses follow the BMP at:

<http://www.dep.state.fl.us/water/nonpoint/glbmp07.pdf>

Please follow the Best Management Practice for Florida Green Industries at:

<http://www.dep.state.fl.us/central/HomeMeetingsTraining/FLGreen/BMP Book final.pdf>

# THRIVE™

## BRANDED FERTILIZER

## PRECAUTIONARY STATEMENTS

May cause eye or skin irritation. Maybe harmful if swallowed. Wash hands thoroughly after handling. Wear eye and face protection. Do not breathe dust. Dispose of contents/container in accordance with Federal, state and local regulations. Do not apply near water, storm drains or drainage ditches. Do not apply if heavy rain is expected. Apply this product only to your lawn/garden, and sweep any product that lands on the driveway, sidewalk, or street, back onto your lawn/garden.

## FIRST AID

Eye Contact - flush eyes with running water for at least 15 minutes. Skin Contact - wash from skin with soap and water. Ingestion - dilute with water or milk. If necessary, induce vomiting only when victim is conscious. Call a physician. Get medical attention if you feel unwell.

## KEEP OUT OF REACH OF CHILDREN



## WARNING

Causes serious eye irritation. May cause skin irritation after prolonged exposure.

## FOR CHEMICAL EMERGENCIES CALL: **CHEMTREC 1-800-424-9300**

**LIMITS OF WARRANTY:** MEARS FERTILIZER, INC. and seller warrant that this product conforms to the chemical description on the label and is reasonably fit for the purpose stated on such label only when used in accordance with the directions under normal use conditions. Except as specifically stated below, NO WARRANTIES, WHETHER EXPRESSED OR IMPLIED, ARE MADE WITH RESPECT TO THE PRODUCT OR ITS USE, AND NO AGENT OF THE MANUFACTURER OR OF THE SELLER IS AUTHORIZED TO DO SO.

Buyer and user of this product assume all responsibility for handling, storage and use not in accordance with directions. It is impossible to eliminate all risks inherently associated with the use of the product. Plant injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, presence of other materials, or the manner of use or application, all of which are beyond manufacturer's and seller's control. In no case shall the manufacturer or seller be liable for consequential, special or indirect damages resulting from the use or handling of this product.

## Manufactured and Guaranteed By:

Mears Fertilizer, Inc. - P.O. Box 1271

El Dorado, KS 67042 - Phone: (800) 345-9143

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**Net Wt. 50 Lbs. (22.68 Kgs.)**