

## LIQUID HUMIC ACID

### TURF & ORNAMENTAL USE

#### What is HumaGrow™ T&O?

**HumaGrow T&O** is an OMRI listed organic liquid humic acid derived exclusively from the fresh water Leonardite deposits found in western Texas. Leonardite consists of the remains of plants and animals that lived millions of years ago, and is considered by many to be the best source of humic substances (humic acid and fulvic acid).

**HumaGrow T&O** has a very high ion exchange capacity and will readily bond with both positive and negative molecules. **HumaGrow T&O** reduces nutrient leaching and helps unlock nutrients bound in the soil. **HumaGrow T&O** has a larger molecule size than FulvaGrow T&O keeping it stable in the soil and available in soil solutions. **HumaGrow T&O** makes all soil applied fertilizers more efficient.

#### **HumaGrow T&O:**

- Contains carbon, oxygen, hydrogen, nitrogen and sulphur.
- Provides auxins, amino acids and organic phosphates which stimulate plant growth.

#### **HumaGrow T&O:** (Continued)

- Readily forms mineral chelates for better plant uptake.
- Contains over 60 different minerals that are in a form easily utilized by various living organisms.
- More effective than solid humic substances because HumaGrow T&O is much more available to the plant.
- Increases germination rates.
- Enhances root initiation & increases root growth.
- Increases the permeability of plant membranes, enhancing the uptake of nutrients.
- Shown to reduce nitrate leaching.
- Improves water-holding capacity of soil.
- Improves drought tolerance.
- Inhibits the enzyme indole acetic acid oxidase thereby hindering IAA destruction.
- Increases chlorophyll development within plant leaves.
- Increases production of high energy ATP within plant cells.
- Aids in correcting plant chlorosis.
- Improves soil structure and texture.



## Active Ingredients:

Humic Acids . . . . .	6.0%
Other Ingredients . . . . .	94.0%
TOTAL . . . . .	100.00%

## General Information:

**HumaGrow T&O** is formulated for use by foliar or soil application. **HumaGrow T&O** can be applied all season long using no more than 2.5 gallons per acre per application. *Products like **HumaGrow T&O** that contain humic acids have been shown to increase the uptake of micronutrients.*

## GENERAL RECOMMENDATIONS

**HumaGrow T&O** can be applied to trees, ornamentals, garden landscaping, lawns and fine turf.

**Cool Season Grasses:** Apply 3 to 6 ounces per 1,000 sq. ft. once a month throughout the season. Applications are most beneficial when made prior to or during stress periods.

**Warm Season Grasses:** Apply 3 to 8 ounces per 1,000 sq. ft. once a month throughout the growing season. Applications are most beneficial during overseeding and prior to or during stress periods

**Ornamentals:** Apply 4 to 6 ounces per 1,000 sq. ft. 1 to 3 times during the season. Applications can be made as a broadcast spray or injected into the irrigation system. Applications should be targeted at the soil; however, foliar contact is not detrimental. Mix with deep root injections at a rate of 4 quarts per 10 gallons of injection solution.

## COMPATIBILITY

**HumaGrow T&O** is compatible with most common liquid nutrients and micronutrients; however, **USER ASSUMES FULL RESPONSIBILITY** to ensure compatibility when tank mixing with other products. It is recommended to always perform a jar test with the components of a tank mix in the same proportions as they will be used. If unfamiliar with the use of **HumaGrow T&O**, check with a LidoChem, Inc. representative.

*Note: In solutions with a pH below 6.5 it is recommended that **FulvaGrow T&O** be used. **FulvaGrow T&O** should also be your choice for foliar applications.*

### CAUTION: KEEP OUT OF REACH OF CHILDREN

Harmful if swallowed. Avoid breathing spray mist. May cause irritation of nose, throat, or skin. Avoid contact with eyes, skin, and clothing.

This product is manufactured and distributed by LidoChem, Inc. HumaGrow is a registered trademark of Affiliated Minerals, Inc. used under license by LidoChem, Inc.

