

**Simplot**

# LIQUIMAXX

WITH UMAXX TECHNOLOGY

# 40-0-0

**LIQUIMAXX 40-0-0 is a high concentrated Stabilized Liquid Nitrogen, which delivers Nitrogen over an extended period.**

**LIQUIMAXX 40-0-0 reduces the losses associated with Nitrogen such as volatilisation, leaching and denitrification.**



**ANALYSIS:**

40% Nitrogen as Stabilized Urea Ammonium Nitrate.

**DIRECTIONS FOR USE TURF:**

Tees and Greens: 0.5 - 0.75 L / 100 m<sup>2</sup>

Fairways: 50 - 75 L / Hectare

Note: For soil types with a pH greater than 7.5 use half rates at more regular intervals

**WATER RATES:**

Tees & Greens: 6 - 10 L / 100 m<sup>2</sup>

Fairways: 400 - 1000 L / Ha

Apply early morning or late afternoon.

Available exclusively from your nearest Simplot distributor:

**SIMPLOT PARTNERS.** 20 DeHavilland Rd, Braeside, Vic 3195 (03) 9587 4993

**NRRBS.** 1/A Gateway Dr, Labrador, Qld 4215 (07) 5537 7323

**TURFCARE NSW.** Unit 8-24 Clyde St, Rydalmere, NSW 2116 (02) 9684 6611

**TOTAL TURF.** 2 Jessel Place, Duncraig, WA 6023 (08) 9448 5263

**Simplot**

# LIQUIMAXX

WITH UMAXX TECHNOLOGY

# 40-0-0

The efficient use of nitrogen is quickly becoming the most critical issue in all types of crops grown. This certainly is the case in Turfgrass where the use of Urea and other Ammonium based fertilisers is used extensively. From the time these types of fertilisers are added to the ground a variety of chemical and environmental changes occur. These changes have a detrimental effect on nitrogen efficiency and the environment. LIQUIMAXX 40-0-0 is a cost effective stabilized nitrogen, which helps overcome the inefficiencies and environmental impact of these nitrogen losses.

Urea once applied will undergo a hydrolysis (Breakdown) with the involvement of moisture and the urease enzyme. Urea is then broken down to ammonia and carbon dioxide. Both these gases will be released to the atmosphere. This process is known as VOLATILISATION. This will account for up to 30% of the total nitrogen lost until the fertiliser reaches the soil profile. Up to 20 mm of rainfall or irrigation is required to completely place all Urea into profile. LIQUIMAXX 40-0-0 contains an additive (NBPT), which suppresses the enzyme activity of urease, and allows up to 2 weeks for the fertiliser to be incorporated in the soil.

Once the Urea and other Ammonium based nitrogen sources reach the soil profile an immediate oxidation process occurs called NITRIFICATION. With the aid of bacteria the process of converting ammonium to nitrite and then to nitrate production is unstoppable. Once the nitrogen has a negative charge it can be easily leached, as it cannot hold onto soil colloids. This leaching is another major loss of Nitrogen, particularly in turf management where profiles are sandy and watering is frequent.

Another major loss of Nitrogen is when the soil profile becomes saturated or waterlogged. The Anaerobic bacteria will strip the oxygen away from nitrates thus converting the nitrogen back to Nitrogen gas (N<sub>2</sub>) or Nitrous oxide (N<sub>2</sub>O). The gases are returned to the atmosphere. This process is called Denitrification. In both the cases of leaching and denitrification the additive in LIQUIMAXX 40-0-0 (DCD) can prevent these losses for up to 16 weeks by keeping the nitrogen in an ammonium form. In the positive charged ammonium form limited leaching will occur, and as no available oxygen is present therefore no denitrification will occur.

### The advantages of LIQUIMAXX 40-0-0 include

- More efficient use of all ammonium based fertilisers
- Less impact on the environment from these losses
- Economic
- Slow release effect without the use of coatings or polymers.

### Compatibility

LIQUIMAXX 40-0-0 is compatible with a wide variety of commonly used spray chemicals. When mixing with chemicals always mix a small quantity (jar test) to observe if any reaction occurs. If jar test is negative do not proceed with application.