

# STABLE N

40 - 0 - 0 Stabilised Nitrogen

*SIMPLOT STABLE N is a high concentrated stabilised liquid nitrogen, which delivers Nitrogen over an extended period.*

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The efficient use of nitrogen is quickly becoming the most critical issue in all types of crops grown. From the time these types of fertilizers 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.

Simplet Stable N is a cost effective stabilised nitrogen, which helps overcome the inefficiencies and environmental impact of these nitrogen losses. Urea and other ammonium based fertilizers 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. This process is known as VOLATILISATION. This will account for up to 30% of the total nitrogen lost until the fertilizer reaches the soil profile. Simplet Stable N contains an additive (NBPT), which suppresses the enzyme activity of urease, and allows up to 2 weeks for the fertilizer 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 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 its original Nitrogen gas (N<sub>2</sub>) or Nitrous oxide (N<sub>2</sub>O). This process is called Denitrification. In both the cases of leaching and denitrification the additive in Macro Life Stable N can prevent these losses for up to 16 weeks by keeping the nitrogen in an ammonium form.

PRODUCT ANALYSIS		w/v%	w/w%
Nitrogen	(N)	40.0	30.5

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### DIRECTIONS FOR USE

#### BARLEY, OATS, TRITICALE, WHEAT

Aerial Rate: 15 - 20 L / Ha, Water Ratio: 1 : 2 - 4  
1<sup>st</sup> spray early to mid-tillering.  
2<sup>nd</sup> spray at flowering to milky dough.

#### CANOLA

Aerial Rate: 20 L / Ha  
Boom Rate: 20 - 40 L / Ha  
Water Ratio: Apply in maximum practical water.  
Apply at full cabbage. Repeat as required.  
Use higher rate in irrigated situations.

#### COTTON

Aerial Rate: 15 - 20 L / Ha, Water Ratio: 1 : 1 - 2  
Foliar Rate: 15 - 20 L / Ha, Water Ratio: 1 : 3 - 15  
Apply prior to irrigation or during water stress situations.  
In young cotton, use a maximum of 5 L / Ha. From squaring onwards use 10 L / Ha in sufficient water.

#### PASTURE (ESTABLISHED)

##### *Extensive & intensive grazing*

Aerial Rate: 7.5 - 10 L / Ha, Water Ratio: 1 : 5 - 10  
Ground Rate: 7.5 - 10 L / Ha, Water Ratio: 1 : 10 - 20  
Apply 1 - 2 applications to clear leafy regrowth as required to enhance overall growth and utilisation.

#### VEGETABLES (GENERAL)

- Foliar Rate: 7 - 10 L / Ha, Water Ratio: 1 : 100  
Monthly application commencing 4 weeks after emergence or 21 days after transplanting.
- Fertigation Rate: 10 - 15 L / Ha

#### VINES

- Foliar Rate: 5 L / Ha, Water Ratio: 1 : 100  
Apply as 4 - 6 x 5 L / Ha applications commencing from bud burst to flower set.
- Fertigation Rate: 10 L / Ha  
Apply up to 4 x 10 L / Ha every 14 days during growing season and at least 1 dose post harvest.

### PRODUCT SPECIFICATIONS

S.G:	1.31	Appearance:	Green clear liquid
pH (Neat):	6.5 - 7.5	Shelf Life:	3 years

### PRODUCT WEIGHTS & STORAGE

5 Litre:	6.8	Storage & Disposal:	Store in original container, tightly closed in a safe place. Wash out and destroy empty containers.
20 Litre:	27.2		
200 Litre:	271.5		
1000 Litre:	1390.0		

### NOTE BEFORE USE

The suggested application rates are designed for typical conditions and act as a guide only. Differences in soil types, climatic conditions, water quality, application methods and processes and therefore necessitate corrections to ensure optimum results. Best practice requires that applications under extreme weather conditions such as temperatures over 30°C, high humidity, frost, rain should be avoided. It's recommended that prior to applying to a crop or area for the first time, or in combination with other chemicals, a small test area should be sprayed and observed prior to the total crop spray.