



## PRODUCT LIST









Achieving the ultimate surface requires an integrated system of nutrition fundamentals, soil health and efficient water management.

For over 17 years the Australian made GMX liquids have meshed together to provide a comprehensive and flexible management solution for even the most challenging growing situation.

#### **MACROS**

Macro nutrients form the foundation of any management system. Featuring the industry leader GreenMaxx®, various NPK combinations and full nutrient formulations, these are the core products that will drive your growth.

#### **TRACES**

Almost as important as NPK, a complete trace element profile is the only way to ensure a high quality surface. This range can address any deficiencies holding back growth.

## **AUGMENTS**

Managing aspects like soil structure, microbial activity, nutrient lockup and water quality can greatly increase fertiliser efficiency. Augmenting your inputs to the optimum level will reduce the strain on budgets.

#### **HYDRATES**

The efficient use of water is one of the biggest challenges moving forward. Get the most out of every drop with these high quality surfactants.



# LIQUIMAXXIMUM NITROGEN CONTROL

The efficient use of nitrogen is one of the most critical issues facing turf managers today, especially with the dominance of urea and ammonium based fertilisers. Even before the fertiliser hits the ground, challenges such as maximising budget expenditure, minimising nutrient loss and environmental management must be considered.

When urea is applied, it starts undergoing a hydrolysis involving moisture and urease enzymes, causing it to break down into ammonia and carbon dioxide. Both these gases will escape to the atmosphere in a process known as **volatilisation** which can account for up to 30% of the total nitrogen lost until it reaches the profile. The LIQUIMAXX products contain an additive (NBPT) which suppresses the enzyme activity of urease, allowing up to 2 weeks for the fertiliser to be incorporated.

Once the urea and other ammonium based nitrogen sources reach the soil profile, an oxidation process begins called **nitrification** and bacteria in the profile continue to convert the ammonium to nitrite, continuing volatilisation. These two processes have the effect of changing the charge of the nitrogen to negative where it can be easily leached as it cannot hold onto soil colloids. This leaching is another major loss of nitrogen, particularly in sandy profiles and where watering is frequent, which can add to environmental pressures and waterway contamination. The LIQUIMAXX products contain an denitrification additive (Dicyandiamide) which slows down this conversion, allowing the nitrogen to remain in the profile longer.

## LIQUIMAXX® GREENMAXX®

20 Nitrogen6 Iron

Magnesium

RATE / 100m<sup>2</sup> 200 - 500 mL

#### 20% Nitrogen, 6% Iron, 1% Magnesium

- Industry leader in turf nutrition.
- Proudly manufactured in Australia.
- ▶ Stabilised nitrogen for efficient release and reduced loss.

SAMON BSA

▶ Iron for chlorophyll and colour production.



## LIQUIMAXX® GREENMAXX® K

15 Nitrogen 10 Potassium 4 Iron Magnesium

RATE / 100m<sup>2</sup> 200 - 500 mL

#### 15% Nitrogen, 10% Potassium, 4% Iron, 1% Magnesium

- Stabilised nitrogen for efficient release and reduced loss.
- Potassium as highly available citrate.
- ▶ Iron and magnesium for chlorophyll and colour production.

## LIQUIMAXX® GREENMAXX® COMPLETE

17 Nitrogen 6 Iron

Magnesium

RATE / 100m<sup>2</sup> 200 - 500 mL

## 17% Nitrogen, 6% Iron, 1% Magnesium +Traces

- ▶ The power of GreenMaxx® with a complete trace packages.
- Stabilised nitrogen for efficient release and reduced loss.
- Iron for chlorophyll and colour production.

## LIQUIMAXX® N-MAXX-40

40 Nitrogen

#### RATE / 100m<sup>2</sup> 200 - 500 mL

40% Stabilised Nitrogen

- Combination of upfront and stabilised nitrogen.
- Supply your base nitrogen requirements.
- Avoid volatilisation and nitrification.

## **LIQUIMAXX® 12-0-20**

12 Nitrogen 20 Potassium 0.5 Iron

RATE / 100m<sup>2</sup> 200 - 400 mL 12% Nitrogen, 20% Potassium, 0.5% Iron

- Stabilised nitrogen for efficient release and reduced loss.
- High levels of available potassium in citrate form.
- Balanced NPK for turf hardening, reducing disease pressures.
- Iron for chlorophyll and colour production.

## LIQUIMAXX® 10-1-10

10 Nitrogen Phosphorus 10 Potassium 0.5 Iron

RATE / 100m<sup>2</sup> 200 - 400 mL

## 10% Nitrogen, 1% Phosphorus, 10% Potassium, 0.5% Iron

- Stabilised nitrogen for efficient release and reduced loss.
- Phosphorus for cell division.
- Potassium for turf hardening.
- Iron for chlorophyll and colour production.

**GMX MACRO** 

## **GMX IRON PLUS**

12 Nitrogen8 Iron1 Magnesium

RATE / 100m<sup>2</sup> 200 - 500 mL

#### 8% Iron, 12% Nitrogen, 1% Magnesium

- ▶ Designed to rapidly achieve a deep rich colour.
- ▶ High levels of iron for excess chlorophyll production.
- Quality source of upfront nitrogen.

## **GMX HIGH K**

30 Potassium

RATE / 100m<sup>2</sup> 200 - 400 mL

#### 30% Potassium

- Your source of bulk potassium in an organic citrate form.
- ▶ Molecules are rapidly absorbed and converted into carbohydrates.

WINDSHAM STRAIGHT

RAKIDI BAKID

- ▶ Increase hardening to reduce wear and lower disease pressures.
- No nitrogen, chlorides or sulphur.

## **GMX CONTROL PK**

20 Phosphorus30 Potassium

RATE / 100m<sup>2</sup> 200 - 400 mL

#### 20% Phosphorus, 30% Potassium

- ▶ Slow release form of phosphorus for cell division.
- ▶ High potassium for turf hardening can reduce disease pressures.
- Increase turgidity for reduced wear and regulated osmotic activity.

## **GMX TRIPLE SIL**

15 Potassium
30 Silica
1 Humic / Fulvic

RATE / 100m<sup>2</sup> 20 - 30 mL

#### 30% Silica, 15% Potassium

- Silica and potassium controls transpiration during high stress.
- ▶ Reinforce xylem for improved nutrient distribution and strength.
- ▶ Hardened turf offers the flexibility of increased mow heights.





## **GMX HI START**

10	Nitrogen
13	Phosphorus
_	Deteccion

5 Potassium1 Zinc

20 Organics

RATE / 100m<sup>2</sup> 150 - 200 mL

## 10-13-5 NPK, 1% Zinc, 20% Organics

- Perfect for renovation through to ongoing management.
- ▶ Accelerate establishment of root systems.
- Help improve ongoing stress tolerance.

## **GMX LPC**

41.5 Potassium

RATE / 100m<sup>2</sup> 200 mL

#### Liquid Potassium Carbonate

- ▶ Immediately available source of potassium.
- ▶ Help improve stress tolerance in colder months.
- ▶ High potassium for turf hardening can reduce disease pressures.
- ▶ Adjust pH balance in acidic soils.

## **GMX SIMPHOS**

14 Nitrogen20 Phosphorus

RATE / 100m<sup>2</sup> 200 - 300 mL

#### **Ammonium Polyphosphate**

- ▶ Concentrated liquid phosphorus in a polyphosphate form.
- ▶ Phosphorus required for root development and growth.
- Immediately available nitrogen.
- ▶ Reduce potential for nutrient lockup.

MARKIN BARK

Growth is controlled not by the total amount of resources available, but by the scarcest resource – the limiting factor.

Liebig's Law of the Minimum

## **GMX TRACES**

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Iron
Magnesium
Zinc
Manganese
Copper
Boron
Molybdenum

RATE / 100m<sup>2</sup> 200 - 500 mL

#### Multi-Trace Element Fertiliser

- High quality chelated complex.
- Address deficiencies in vital trace elements.

#### Iron

The most useful tool in maintaining grass colour without triggering excessive growth is iron. The application of iron will force turf to produce Chlorophyll in excess thus giving the green up required. Essential for production other enzymes involved in Oxidation and Reduction reactions.

#### Magnesium

Vital to the completion of the greening effect. Magnesium will form the central structure of the chlorophyll cell.

#### Zinc

Required for the production of the hormone Auxin, which controls cell expansion and elongation and is vital in sustaining normal growth patterns.

#### Manganese

Like iron, manganese is involved in oxidation and reduction reactions and in the production of enzymes to control growth.

#### Conner

Involved the photosynthetic reaction and in the production of enzymes.

#### Boron

Vital for the Meristematic Cells (growing point) where actual cell division occurs and in the transportation of sugars through turf.

#### Molybdenum

Required in the production of enzymes to assimilate nitrogen into turf. Molybdenum converts nitrate nitrogen into ammonium nitrogen.



## **GMX CHELATED IRON**

7 Iron

7% Chelated Iron

RATE / 100m<sup>2</sup> 200 - 500 mL

- Chelated for immediate use.
- Iron for chlorophyll and colour.

## **GMX CHELATED MAG**

WEST CONSTRUCTION

5 Magnesium

5% Chelated Magnesium

RATE / 100m<sup>2</sup> 200 - 500 mL

- Chelated for immediate use.
- Magnesium for chlorophyll.

## **GMX BORON**

6 Nitrogen

15 Boron

RATE / 100m<sup>2</sup> 100 - 300 mL

15% Boron, 6% Nitrogen

- Boron is vital for cell differentiation at growing tips.
- Reduce stunting, curling and malformation of turf structures.
- Assist the transport of sugars through the turf.
- Precise control to avoid toxicity.

## **GMX CALCIUM EDTA**

WINDSHIP SHOW

5 Calcium

5% Calcium as EDTA Chelate

## **GMX COPPER EDTA**

STREET BURNES

6 Copper 6% Copper as EDTA Chelate

## **GMX MANG EDTA**

6 Magnesium 6% Magnesium as EDTA Chelate

## **GMX ZINC EDTA**

THE SHOW IN SHOW

10% Zinc as EDTA Chelate 10 Zinc

**GMX TRACES** 

With the increased use of effluent water, higher levels of sodium may be delivered to soil profiles on a continuous basis. Sodium is a leading cause of compaction, poor soil structure, lack of growth and poor water filtration.

Sodium is attracted to the negatively charged sites of soil colloids and this is where the accumulation occurs. As these levels rise, uptake of other cations such as magnesium and calcium will be reduced, causing lock up. At the higher concentrations, sodium is toxic to grass.

As sodium is a single charged cation, it can be removed by a double or divalent cation. The most effective cation is calcium. When high concentrations of soluble calcium flood the exchange sites, the sodium is forced away and then is removed via irrigation or rain fall.

## **GMX SOCAL**

11 Nitrogen 16 Calcium

RATE / 100m<sup>2</sup> 300 - 600 mL

## 11% Nitrogen, 16% Calcium

► Highly concentrated calcium and nitrogen fertiliser for the treatment and removal of sodium accumulated in soil profile.

## **GMX SOCAL MAG**

12 Nitrogen12 Calcium

Calcium Magnesium

RATE / 100m<sup>2</sup> 150 - 300 mL 12% Calcium, 3% Magnesium, 12% Nitrogen

Added magnesium will contribute to chlorophyll production and assist in the sodium displacement process.

CARAMAN BANK

## **GMX SOCAL LESS N**

16 Calcium

RATE / 100m<sup>2</sup> 200 - 400 mL 16% Calcium

- ▶ Treat and remove sodium accumulated in soil profile.
- ▶ No nitrogen for more flexibility in nutrients programs.



# DROPZONE SOIL RECOVERY SYSTEM

Just like any high performance machine, the engine that runs a quality surface needs regular maintenance by a skilled mechanic. DropZone is that skilled mechanic. Running your soil at full speed with constant chemical and fertiliser applications, wetting and drying pressures and poor water quality can cause your profile to seize up and barely turn over. Bicarbonates present in effluent water can accumulate in the soil profile to interact with calcium to form insoluble compounds and wetting cycles can misalign the charge of ions.

The unique combination of acids and nutrients work through the profile to free the insoluble deposits and flush out bicarbonates. Vital turf nutrients like phosphorus, calcium, iron and sulphur that may be trapped in the profile are made plant available, supercharging growth and improving soil structure.

Regular tune ups of **DropZone** will reduce build up, boost soil efficiency and get more mileage out of the fertiliser you use. **DropZone** will have you back on the road in no time.

## DROPZONE

Blend of organic and synthetic acids

5 Nitrogen7 Calcium0.5 Iron

#### RATE / 100m<sup>2</sup>

50 - 200 mL / 100m<sup>2</sup>

#### Soil Recovery System

- ▶ Reduces bicarbonate levels.
- Solubilise locked up nutrients in the profile.
- Improves nutrient uptake.
- Reduces pH.
- Reduces sodium.
- ▶ Contains no chlorides.
- Contains calcium iron and nitrogen.

## DROPZONE INJECTABLE

25

Blend of organic and synthetic acids

#### RATE / 100m<sup>2</sup>

Adjust rate according to water quality and flow rate

#### Soil Recovery System

- ▶ Reduces bicarbonate levels.
- Solubilise locked up nutrients in the profile.
- ▶ Improves nutrient uptake.
- ▶ Reduces pH.
- ▶ Reduces sodium.
- Contains no chlorides.

**GMX AUGMENTS** 

ALBANDON BANG

## **GMX KELP XTRA**

3	Nitrogen
1.5	Phosphorus
0.5	Potassium

0.5 Zinc

0.5 Fulvic Acid 50K Auxins (ug/L)

#### **Kelp Extract**

- ▶ Manipulate inbuilt hormone balancing system to trigger root growth.
- ▶ \Added NPK to support initial growth boost.
- > Zinc to assist cell division of new growth.

RATE / 100m<sup>2</sup>

200 - 400 mL

## **GMX ORGANIC PLUS**

2	Nitrogen
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- 1 Phosphorus 3 Potassium
- Humic Acid 3
- Seaweed 5
- 10 Protein
- 10 Amino Acids
- 20 Carbohydrates

#### Complete Organic Conditioner For Turf

- Maintain biodiversity, nutrient retention and promote larger root systems.
- > Strong root systems helps recovery from pitch marks and damage caused by high traffic.

THE SHELL SHEET

RATE / 100m<sup>2</sup>

200 - 500 mL

## **GMX ORGANIC**

12 Humic Acid

12% Humic Acid

RATE / 100m<sup>2</sup>

100 - 200 mL

- Improve organic content of soil profiles.
- Increase soil's storage capacity for nutrients.

## INJECTABLES N-ACID

Nitrogen 23

24 Sulphur

RATE / 100m<sup>2</sup> 200 - 500 mL

#### Water Treatment & Turf Conditioner

- ▶ Acidify irrigation water, improving rate of penetration.
- Assist in prevent soil crusting, which will improve turf vigour.
- Destruction of bicarbonate to avoid alkalinity and poor soil structure.



## **INJECTAWET**

75

Block Polymer
/ Ethoxylate
Blend

RATE / 100m<sup>2</sup> 200 - 500 mL

#### **Combined Non-ionic Surfactant**

- Highly concentrated soil wetting agent for use in most turf soil types.
- Quick acting combined with other long-lasting soil surfactants.
- ▶ Enhances overall infiltration and dispersion of water in profile.

## **SUMMERSOAK**

Blend Of Non-Ionic Surfactants

RATE / 100m<sup>2</sup> 500 mL / 100 m<sup>2</sup>

#### **Concentrated Soil Surfactant**

- ▶ Assist in overcoming localised Dry Patch and water repellency.
- ▶ Fast correction and longer residual wetting effects.
- Overcoming repellency factors caused by thatch and organic acids.

## **GMX HYDRATES**

## OPTIMUM NOZZLE SELECTION CHART

	LiquiMaxx GreenMaxx	LiquiMaxx GreenMaxx K	LiquiMaxx N-Maxx 40	LiquiMaxx 10-1-10	LiquiMaxx 12-0-20	GMX Control PK	GMX Iron Plus	GMX High K	GMX Hi Start	GMX TripleSil	GMX Simphos	GMX Traces	GMX Chelated Iron	GMX Chelated Mag	GMX Kelp Xtra	GMX Organic	GMX Organic Plus	GMX Socal	GMX Socal Mag	GMX Socal Less N	DropZone	Summersoak
Yellow (80 Mesh)										200	150								200			
Red* (80 Mesh)	400	400	400	400	400	400	400	400	400	300		400	400	400					400			
Gray (50 Mesh)	600	600	600	600	600	600	600	600	600			600			600		500					
White (50 Mesh)	800	800	800	800	800	800	800	800	800			800			800	800	800					
Blue (50 or 30 Mesh)															1000	1000	1000	1000	1000	1000	1000	1000
Immediate Irrigation Req.																		✓	✓	✓	✓	<b>✓</b>

<sup>\*</sup> Use of adjuvant will assist in uptake of product.

Rate

Optimum water rate

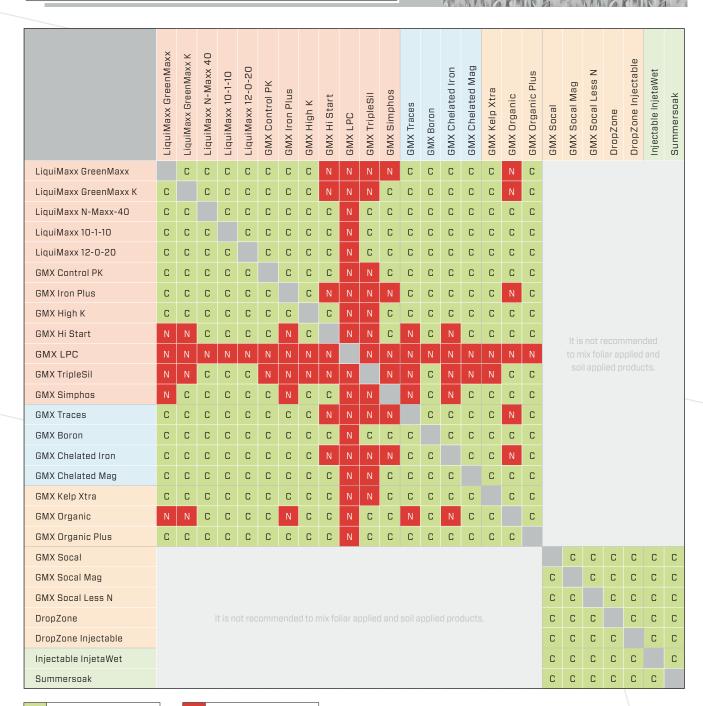
Recommendations are based on:

Sprayer Series: . Toro Multi Pro® .	Water Rate x Target Speed x Nozzle S	Spacing = L / m (nozzle)
Target Speed:	Nozzle Spacing:	Pressure:
5.1Km/H	50.8cm	3 Bar

 $Speak \ to \ your \ local \ Indigo's \ representative \ for \ assistance \ calibrating \ these \ to \ your \ own \ machinery.$ 

**NOZZLE CHART** 

## PRODUCT VS PRODUCT



C COMPATIBLE

N NOT COMPATIBLE

#### TERMS AND CONDITIONS OF USE COMPATIBILITY CHART

- It should be used as a guide only. It relates only to mixing GMX liquid products with other GMX liquid products.
- · Results obtained were conducted under standard laboratory conditions. Variations may occur in the field such as water quality and climate.
- Indigo provides no guarantees or warranties with respect to:
  - The compatibility of these chemicals;
  - The efficacy of the chemicals;
  - The suitability of these mixtures for use on turf.
- Tests were conducted using GMX liquid products at recommended application rates with water rates.
- Subsequent to the time of testing, Indigo may have changed product formulations and recommended dilution rates and application rates.

## **COMPATIBILITY**