



A V A R D

A unique range of  
high performance turf  
maintenance products



A unique organic fertiliser with  
slow release nitrogen



A range of advanced liquid and granular  
fertilisers with innovative additional benefits



A range of quality liquid  
seaweeds with nutrients



A unique soil surfactant with the added  
benefit of increased stress resistance  
and root stimulation



Two highly concentrated liquid irons  
with rapid greening, one with  
the benefit of added potassium



A liquid iron formulated  
with advanced surfactant



A hard surface cleaner  
and moss killer

# Introducing the Award range

Available exclusively through Aitkens and Avoncrop Amenity Products is a unique family of premium products, designed specifically for the sportsturf industry. The Award range covers an array of products including fine turf granular fertiliser, liquid fertilisers, liquid seaweed, wetting agents and liquid irons.

Continuing investment into the research and development of high quality sportsturf management products has enabled us to enhance and evolve existing products in the range, as well as creating exciting new ones. This year sees the launch of our latest product Nutri-Pro, a range of advanced liquid and granular fertilisers designed to provide precise nutrition with some innovative additional benefits such as amino acids and trace elements. As with all of our Award products, Nutri-Pro uses the very best ingredients and formulations to ensure unparalleled performance.

In addition to these unique and high performance products, both Aitkens and Avoncrop Amenity Products offer exceptional service and customer support with experienced technical specialists who can advise on all aspects of turf maintenance nationwide.





## A unique organic fertiliser with slow release nitrogen

Ultima provides sustained growth with a balanced level of nitrogen over a 12 week period. Added nutrients include: – soya isolates, seaweed, fish meal, potassium nitrate, ammonia, organic nitrogen and methylene urea. Exceptional results have been achieved with Ultima, producing healthy plants and strong sustained growth.

The dependable release using the four tier nitrogen ensures a slow, even uptake of nutrients, even in cold weather. The naturally occurring amino and humic acids help stimulate the plant, giving increased tillering, sward density and increased wear under close mowing. Fired ceramic Clinoptilolite Zeolite has the highest density capillary surface area of all zeolites and helps improve long term rootzone porosity and water to air volume.

### Benefits

- Four Tier nitrogen staged release
- Natural amino and humic acids with trace elements
- Premium clinoptilolite zeolite
- 12 weeks longevity from methylene urea
- Assured release irrespective of climatic conditions
- Triggers root extension and boosts mycorrhiza population
- A denser, more resilient sward
- Soya isolates, to boost protein, and enzymes available for root extension
- Contains terralift TX base
- Low sulphur levels compared to standard fertilisers

## Formulations



### Ultima 12-0-14 +3% MgO

- Spring and summer formulation where no phosphate is required
- High levels of potash to boost soil reserves and promote hard wearing grass
- 3% magnesium for improved photosynthesis
- Nitrogen levels designed to perform well throughout the season
- Balanced growth over an extended period

### Ultima 14-2-8 +2%Fe +3% MgO

- High nitrogen for spring and summer without excessive growth
- Phosphate included to aid root growth in soils with low reserves
- Iron and magnesium promotes harder growth and boosts colour
- Potash to improve wear tolerance

### Ultima 5-0-15 +4%Fe +3% MgO

- An ideal autumn or early spring starter feed
- High potash to promote hard wearing and resilient turf
- Iron to give colour at low temperatures and harden the sward
- Nitrogen sources are suited for cooler seasons

### Ultima 6-4-12 +3% MgO

- NPK ratio suited to late and early use
- Ideal for using as a pre-seeder on greens when over sowing sensitive fescues and bents, as no ferrous sulphate is present
- High potash to promote hardening of soft growth
- Phosphate encourages root development

Available in 20 Kg bags

## Analysis

Analysis	Application rate	Kg N/Ha @ 30 g/m <sup>2</sup>	Kg P/Ha @ 30 g/m <sup>2</sup>	Kg K/Ha @ 30 g/m <sup>2</sup>	Pack coverage @ 30 g/m <sup>2</sup>
12-0-14 +3% MgO	25-35 g/m <sup>2</sup>	36	0	42	666 m <sup>2</sup>
14-2-8 +2% Fe +3% MgO	25-35 g/m <sup>2</sup>	42	6	24	666 m <sup>2</sup>
5-0-15 +4% Fe +3% MgO	25-35 g/m <sup>2</sup>	15	0	45	666 m <sup>2</sup>
6-4-12 +3% MgO	25-35 g/m <sup>2</sup>	18	12	36	666 m <sup>2</sup>

## Application

The fertiliser spreader should be calibrated prior to initial use and thereafter if the rate of application is changed.

Spreader Setting Guide

Spreader	Spread width (m)	Cone setting	Application rate (Full rate)		Application rate (Half rate)	
			30 g/m <sup>2</sup>	35 g/m <sup>2</sup>	30 g/m <sup>2</sup>	35 g/m <sup>2</sup>
Accupro 2000 / SR-2000	2.7	5	L	M	K	K½
Ev-N-Spread Range	1.75	-	18	19	14	15

These settings are provided as a guide only and have been calibrated at a walking speed of 3.5 mph. Regular calibration of the spreader should take place.

### **Amino Acids**

Amino acids are required to produce a healthy plant and encourage deeper rooting. During times of stress e.g. heavy rainfall, anaerobic soil conditions, compacted soil, high salinity, frost, cold, heat and drought, there is a greater demand for amino acids. The addition of supplemental amino acids (L-form) to the Nutri-Pro range of fertilisers help alleviate turf stress and provide a healthier, stronger plant.

### **Trace Element Package**

A combination of all the necessary micro nutrients required for healthy turf has been added, including zinc, copper and manganese. This provides increased leaf strength, improved rooting and an improved plant metabolism.

### **Bovey Basin Lignite**

This unique freshwater source of lignite ensures there are no detrimental salt levels present, unlike other lignites produced from seawater sources. It contains over 13 trace elements, humic and fulvic acids which give support for microbial activity. Lignite also provides a high Cat Ion Exchange Capacity (CEC) when compared to many soil amendments. It allows nutrients to be held for longer periods of time in the soil, enabling them to be fully utilised by the plant, therefore reducing loss by leaching.

# **Nutri-Pro**<sup>TM</sup>

## **A range of advanced liquid and granular fertilisers with innovative additional benefits**

### **NUTRI-PRO FINETURF RANGE**

The Nutri-Pro Fineturf range contains a combination of conventional release fertiliser with the addition of amino acids, trace elements and the unique Bovey Basin Lignite. The homogeneous 1-2 mm micro-granules each contain the same analysis, providing a uniform application and result.

### **Benefits**

- Advanced longevity and colour
- Increased nutrient performance
- Improves stress resistance and aids recovery
- Contains the necessary trace elements for healthy turf
- Prevents trace element deficiency
- Increased chlorophyll concentration leading to improved photosynthesis
- Will not produce growth flushes when applied
- Dust-free micro-granules for an accurate application

## Formulations

<p><b>Nutri-Pro</b> <b>4-0-10 +10% Fe</b></p> <ul style="list-style-type: none"> <li>• Deters moss while strengthening the plant against disease</li> <li>• Iron and lignite combination gives a quick green up over a longer period of time</li> <li>• Good levels of potassium for periods of cooler temperatures</li> <li>• Amino acids provide a quicker plant response in the early season</li> </ul>	<p><b>Nutri-Pro</b> <b>4-0-24 +2% Fe +3% MgO</b> <b>(includes slow release potassium)</b></p> <ul style="list-style-type: none"> <li>• Contains standard and slow release potassium for a consistent release</li> <li>• Potassium acts as a base feed and iron will harden the turf</li> <li>• The plant will be more tolerant during periods of stress</li> <li>• Added magnesium enhances the colour and growth of the shoots</li> </ul>	<p><b>Nutri-Pro</b> <b>5-5-11 +3% Fe +3% MgO</b></p> <ul style="list-style-type: none"> <li>• Iron and magnesium promote good colour and help photosynthesis during periods of low light levels</li> <li>• 100% ammonical nitrogen giving rapid results even in low soil temperatures</li> <li>• Uniform growth without flushes at disease critical times</li> <li>• Good levels of potassium provide a stronger plant during cooler temperatures</li> </ul>	
<p><b>Nutri-Pro</b> <b>9-0-0 +2% Fe +3% MgO</b></p> <ul style="list-style-type: none"> <li>• An ideal early season starter which works well at lower temperatures</li> <li>• Can be used as a traditional tonic during the growing season</li> <li>• Iron and magnesium help deter any moss and aid turf hardness</li> <li>• Increased nutrient uptake with good growth and colour response</li> </ul>	<p><b>Nutri-Pro</b> <b>12-0-11 +2% Fe +3% MgO</b></p> <ul style="list-style-type: none"> <li>• A balanced NK formulation for when phosphate levels are adequate</li> <li>• Amino acids produce a stronger more resilient plant during periods of summer stress</li> <li>• Iron and potassium help wear and tear during the playing season</li> <li>• Lignite prolongs the nutrient release</li> </ul>	<p><b>Nutri-Pro</b> <b>14-3-11 +3% MgO</b></p> <ul style="list-style-type: none"> <li>• Aids photosynthesis and helps convert nitrogen into leaf protein</li> <li>• Excellent levels of growth and colour without any flushed growth</li> <li>• Added magnesium to enhance the turf colour</li> <li>• Phosphate and potassium promotes a strong and healthy sward</li> </ul>	

## Analysis

Composition	Nutrient level applied at 30 g/m <sup>2</sup> (Kg/Ha)			Nutrient level applied at 35 g/m <sup>2</sup> (Kg/Ha)			Nitrogen breakdown	
	N	P	K	N	P	K	Ammonical	Ureic
Nutri-Pro 4-0-10 +10% Fe	12	0	30	14	0	35	77%	23%
*Nutri-Pro 4-0-24 +2% Fe +3% MgO	12	0	72	14	0	84	77%	23%
Nutri-Pro 5-5-11 +3% Fe +3% MgO	15	15	33	17.5	17.5	38.5	100%	0%
Nutri-Pro 9-0-0 +2% Fe +3% MgO	27	0	0	31.5	0	0	84%	16%
Nutri-Pro 12-0-11 +2% Fe +3% MgO	36	0	33	42	0	38.5	80%	20%
Nutri-Pro 14-3-11 +3% MgO	42	9	33	49	10.5	38.5	74%	26%

\*Includes slow release potassium

## Application

The fertiliser spreader should be calibrated prior to initial use and thereafter if the rate of application is changed.

Spreader Setting Guide

Spreader	Spread width (m)	Cone setting	Application rate (Full rate)		Application rate (Half rate)	
			30 g/m <sup>2</sup>	35 g/m <sup>2</sup>	30 g/m <sup>2</sup>	35 g/m <sup>2</sup>
Accupro 2000 / SR-2000	3.7	5	N	0½	J	K
Ev-N-Spred Range	1.9	–	18	19	14	15

These settings are provided as a guide only and have been calibrated at a walking speed of 3.5 mph. Regular calibration of the spreader should take place. Area treated by 20 Kg bag: 571-666 m<sup>2</sup>

## NUTRI-PRO OUTFIELD RANGE

Our three outfield fertilisers (spring and summer, autumn and winter and slow release) are available in a homogeneous granule 2.5 – 3.5 mm for an easy dust-free application. All are ideally suited to any type of outfield situation.

### Benefits

- Reliable and uniform performance
- All contain balanced NPK formulations
- Two conventional release analysis
- One controlled release spring and summer analysis
- Will produce a good colour with rapid nutrient uptake
- Dust-free homogeneous granule for an accurate application



### Formulations

<b>Nutri-Pro 5-12-12</b> <ul style="list-style-type: none"> <li>• Provides strong healthy growth for heavy winter use</li> <li>• An ideal pre-seeding fertiliser</li> <li>• Aids recovery during periods of heavy wear and colder temperatures</li> </ul>	<b>Nutri-Pro 15-5-5</b> <ul style="list-style-type: none"> <li>• Promotes good colour without excessive growth</li> <li>• Quality granule ensures a fast response</li> <li>• An ideal analysis to aid recovery during the playing season</li> </ul>	<b>Nutri-Pro 16-2-10 +2% Fe+ Methylene Urea</b> <ul style="list-style-type: none"> <li>• A slow release fertiliser for sustained uniform growth without any growth flushes</li> <li>• Provides an extended release of up to three months</li> <li>• Added iron ensures optimal turf colour</li> </ul>	

### Analysis

Composition	Nutrient level applied at 35 g/m <sup>2</sup> (Kg/Ha)			Nitrogen breakdown		
	N	P	K	Ammonical	Ureic	Methylene Urea
Nutri-Pro 5-12-12	17.5	42	42	100%	0%	0%
Nutri-Pro 15-5-5	52.5	17.5	17.5	85%	15%	0%
Nutri-Pro 16-2-10 +2% Fe+ Methylene Urea	56	7	35	62%	26%	12%

### Application

The fertiliser spreader should be calibrated prior to initial use and thereafter if the rate of application is changed.

Spreader Setting Guide

Spreader	Spread width (m)	Cone setting	Application rate	
			35 g/m <sup>2</sup> (Full rate)	35 g/m <sup>2</sup> (Half rate)
Accupro 2000 / SR-2000	3.7	5	R	N
Ev-N-Spred Range	3.5	-	19	15

These settings are provided as a guide only and have been calibrated at a walking speed of 3.5 mph. Regular calibration of the spreader should take place. Area treated by 20Kg bag : 571 m<sup>2</sup>

## NUTRI-PRO LIQUID

A range of advanced liquid fertilisers designed to provide precise nutrition with innovative additional benefits. Nutri-Pro liquids can be tank mixed to provide custom analysis if required (See the tank mixing compatibility chart on page 19).

### Benefits

- Rapid response with controlled release nutrient
- Contains amino acids to improve stress resistance
- Increased performance with leaf and root uptake
- Contains all necessary trace elements for healthy turf
- Phosphite helps strengthen against disease
- Encourages deeper, healthier rooting
- Increased chlorophyll concentration leading to improved photosynthesis
- Will not produce flushed growth when applied
- Range can be tank mixed to provide added benefits and analysis
- Silicon increases plant strength and vigour

### Formulations

#### Nutri-Pro 24-0-0 Plus

- Can be used on its own or tank mixed with other Award products (See the tank mixing compatibility chart on page 19)
- Provides a rapid green up with conventional and controlled release nitrogen
- Flexibility of application rates provides various analysis options

#### Nutri-Pro 12-0-10 Plus

- Increased absorption and transportation of nutrients within the plant
- Applying amino acids saves the plant energy allowing it to photosynthesise normally even under stress conditions
- A NK formulation for when no phosphate is required

#### Nutri-Pro 16-2-6 Plus

- An ideal balanced NPK fertiliser for use during the growing season
- Added phosphate provides increased root growth and a stronger leaf ensuring healthier grass
- Phosphite stimulates and further strengthens the plant

#### Nutri-Pro 4-2-12 Plus

- Phosphite helps strengthen against disease and improve the ability to resist stress
- Amino acids help maintain growth and health of the plant at low temperatures
- Encourages seed germination and root development



### Controlled release

Nitrogen contained within the formulation is a combination of conventional release nitrogen and controlled release Methylene Urea. This provides a longer lasting performance which does not lose any of its immediate availability.

### Amino acids

The amino acid supplements are designed to maximise the health of the turf plant during periods of turf stress. They help increase the rapid uptake of nutrients and ensure efficient utilisation. Turf quality improves due to an increase in photosynthesis and chlorophyll production. The plant will also have an increased metabolism in early and late season making the plant work earlier at lower temperatures which will help in a cold spring when the different grass species grow at different rates.

### Trace elements

Trace elements provide the plant with a range of important micro nutrients which help overcome any deficiencies found within the plant and increase the plants health e.g. root production and leaf strength.

### Phosphite

Potassium phosphite is included in two of the formulations in the range, helping to increase the plants disease and stress resistance and provide a hardier plant. Phosphite converts into a slow release form of phosphate which does not become locked up in high pH soils and helps promote increased root growth and a stronger leaf.

## NUTRI-PRO LIQUID (cont.)

### Analysis

Application rate	Nutri-Pro 24-0-0 Plus			Nutri-Pro 12-0-10 Plus			Nutri-Pro 16-2-6 Plus			Nutri-Pro 4-2-12 Plus		
	N	P	K	N	P	K	N	P	K	N	P	K
20 Ltr-Ha	6	0	0	3	0	2.5	4	0.5	1.5	1	0.5	3
40 Ltr-Ha	12	0	0	5.8	0	4.8	7.9	1	2.9	2	1	6
60 Ltr-Ha	18	0	0	8.9	0	7.5	12	1.5	4.5	3	1.5	9
80 Ltr-Ha	24	0	0	11.5	0	9.6	15.7	2	5.9	4	2	12
100 Ltr-Ha	30	0	0	14.9	0	12.5	20	2.5	7.5	5	2.5	15

### Application

#### Pack size 10 Ltr

Nutrients are delivered to the plant by rapid foliar and root absorption. By applying in low water volumes, the adjuvants and small molecular structure enable the nutrients to be taken up by the leaf. Applying in higher water volumes, the nutrient is taken past the leaf to the rootzone where the nutrient can be taken up by the plant.

All the above analysis can be applied at 20 – 100 Ltr/Ha with a water volume of 400-1000 Ltr/Ha.

The area treated by a 10 Ltr pack = 1000 – 5000 m<sup>2</sup>.

The Nutri-Pro liquid range can be tank mixed with other Award Products to provide custom made analysis to suit your requirements (see the tank mixing compatibility chart on page 19).

#### Nutri-Pro Stand-Up 6% Silica (Si) +15% Soluble Potash (K2O)

- Increased ball roll and green speed
- Assists the removal of annual meadow grass seed heads
- Promotes vertical growth for improved cutting of uneven spring growth
- Height of cut can be raised due to increased ball speed during stress periods
- Ideal for tournament preparation, spray two to four days before start date for maximum results
- Reduces water loss during periods of dry weather
- Strengthens turf and enhances resiliency – ideal for high traffic areas
- Decreased susceptibility of plant to pests and diseases
- Produces higher levels of chlorophyll in the leaf tissue – allowing the plant to utilise higher and lower light levels



### Application

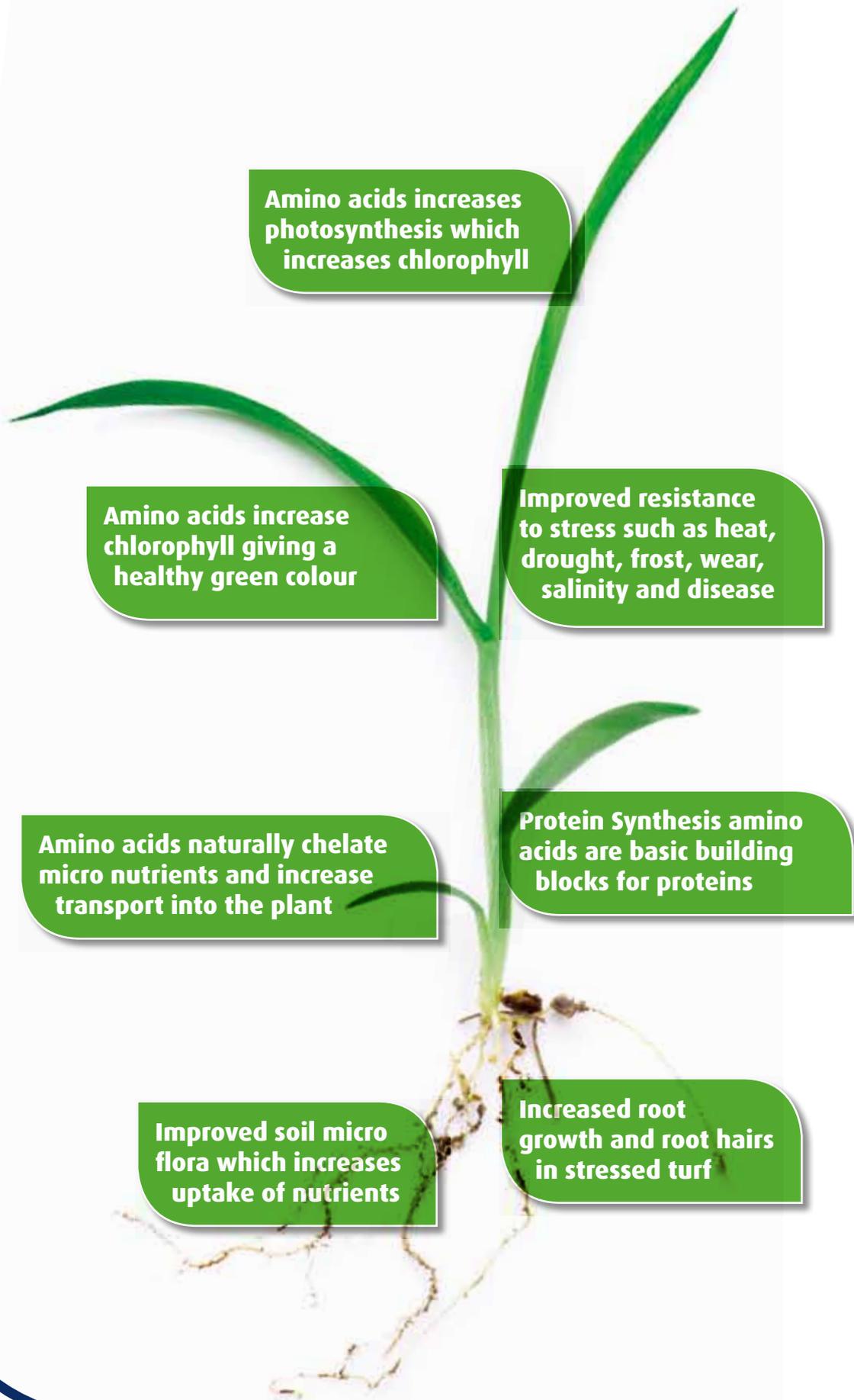
#### Pack size 5 Ltr

Stand-up can be applied at 10 Ltr/Ha with a minimum water volume of 500 Ltr/Ha.

The area treated by a 5 Ltr pack – 5000 m<sup>2</sup>.

Stand-up can be tank mixed with the other Nutri-Pro liquid products to give the turf optimum benefits (see the tank mixing compatibility chart on page 19).

# Effect of Amino Acids on Turf



**Amino acids increases photosynthesis which increases chlorophyll**

**Amino acids increase chlorophyll giving a healthy green colour**

**Improved resistance to stress such as heat, drought, frost, wear, salinity and disease**

**Protein Synthesis amino acids are basic building blocks for proteins**

**Amino acids naturally chelate micro nutrients and increase transport into the plant**

**Increased root growth and root hairs in stressed turf**

**Improved soil micro flora which increases uptake of nutrients**



## A range of quality liquid seaweeds with nutrients

All Surf to Turf liquids are extracted from the seaweed species *Ascophyllum Nodosum*, harvested from the Atlantic Ocean off South West Ireland, which is renowned for its pristine waters. Seaweed is rich in natural sustainable organic compounds, which help turf plants in a variety of ways.

### Benefits

- Increased concentration throughout the range
- Stimulates healthy turf throughout the season
- Aids better rooting, improving fertiliser uptake
- Promotes beneficial soil microbes, breaking down thatch faster
- Better turf colour without flush growth
- Safe and convenient to use on all types of turf
- Natural Gibberellins and Auxins stimulate deep rooting and compact growth
- Cytokinins increase plant metabolism and photosynthesis
- Betaines thicken and strengthen cell walls increasing wear and drought tolerance
- Natural source of trace elements and mineral salts
- Improved overall health, leading to better disease resistance
- Seaweed is also shown to help to alleviate the symptoms of nematode damage

## Formulations

### Pure Seaweed 30% Liquid Concentrate

- 30% Liquid seaweed concentrate
- Extremely rich in trace elements, plant growth stimulants and amino acids
- Stimulates lateral tillering creating a thicker sward
- Increased microbial activity and improved rooting
- Turf more tolerant to stress, drought and disease
- Can be used as part of an integrated parasitic nematode management programme

### Seaweed +23% Nitrogen

- High urea nitrogen seaweed formulation
- Gives sustained colour response
- Encourages turf recovery after winter, and deeper rooting
- Ideal for spring and summer use
- Microbial activity stimulator

### Seaweed +NPK 5-0-10 +2% Chelated Iron +2.5% Mg

- 1:2 N:K ratio for hardening turf
- Added iron and magnesium enhances the colour and growth of the shoots
- Improved wear, cold and disease tolerance
- Ideal for autumn or early spring tonic feed
- Reduces stress and aids disease tolerance

### Seaweed +7% Chelated Iron

- Added Chelated Iron for use throughout the year
- Gives a green up within 24 hours without soft growth
- Ideal for pre-tournament preparation
- Conditions turf, helping to improve disease tolerance and encourage deeper rooting
- Source of trace elements and plant growth stimulants

### Seaweed +NPK 14-0-10 +0.5% Chelated Iron

- Improved tillering without any growth flushes
- Zero phosphate analysis with added iron
- Sustained colour response
- Increases drought and wear tolerance
- Chelated iron gives quick colour response

### Seaweed and nematodes

Recent research on the effects of seaweed on nematodes has found that although products such as Surf to Turf are not nematicides, they can help manage infestations.

Their alleviating effects are probably manifested through the stimulation of antagonists to the nematodes in the soil and the physical blocking of the sensory apparatus of the nematodes. They also have a direct effect on the plant, stimulating the plants natural defence systems against nematode attack as well as stimulating early plant growth, particularly root growth.

Surf to Turf is highly recommended as part of an integrated parasitic nematode management due to the high concentration of seaweed in the formulation. Competitor seaweeds are lower in strength meaning that the same benefits cannot be gained from an integrated programme.

### Analysis

Application rate	Nutrient level applied at 45 Ltr/Ha (Kg/Ha)		
	N	P	K
Triple 30 Seaweed	0.02	0	0.34
23% N	10.35	0	0.68
14-0-10 + 0.5% Fe	6.3	0	4.5
5-0-10 +2% Fe +2.5% Mg	2.25	0	4.5
7% Fe	2.7	0	0.23

## Application

Area	Triple 30 Seaweed	23% N	14-0-10 + 0.5% Fe	5-0-10 +2% Fe +2.5% Mg	7% Fe
Tennis court – regulation 263 m <sup>2</sup>	0.2 Ltr	1.2 Ltr	1.2 Ltr	1.2 Ltr	1.2 Ltr
Golf green 500 m <sup>2</sup>	0.1 Ltr	2.3 Ltr	2.3 Ltr	2.3 Ltr	2.3 Ltr
Bowling green 1475 m <sup>2</sup>	1.1 Ltr	6.6 Ltr	6.6 Ltr	6.6 Ltr	6.6 Ltr
One Acre 4047 m <sup>2</sup>	3 Ltr	18.2 Ltr	18.2 Ltr	18.2 Ltr	18.2 Ltr
One Hectare 10000 m <sup>2</sup>	7.5 Ltr	45.0 Ltr	45.0 Ltr	45.0 Ltr	45.0 Ltr
Pack coverage	13,333 m <sup>2</sup>	2,222 m <sup>2</sup>	2,222 m <sup>2</sup>	2,222 m <sup>2</sup>	2,222 m <sup>2</sup>
Water dilution rate	(500 – 1000 Ltr/ha) / (50 – 100 Ltr/1000 m <sup>2</sup> )				

Time of application: Pure Seaweed, 23% N and 14-0-10 for spring and summer use. Apply at six to eight week intervals throughout the growing season. 5-0-10 and 7% Fe can be applied at anytime of the year to provide a tonic and green-up, except during periods of frost.

Packed in 10 Ltr drums

### Preventative

The blend of premium concentrated surfactants can be applied monthly to form strong lasting bonds with hydrophobic soil particles. Due to the improved concentration of the formulation, Osprey Active will still be 100% active after 30 days and by regularly applying at 30 day intervals, there are no peaks and troughs in performance. This ensures the product is distributed uniformly within the soil profile and will provide the correct consistent moisture to air ratio in the rootzone.

### Curative

By using a premium penetrant and re-wetting agents, Osprey Active offers unparalleled curative control of dry patch. The penetrant allows Osprey Active to move deep through the most repellent soils allowing the re-wetting agents to follow behind, ensuring the area remains receptive to water in the future.

### Amino Acids

The concentrated formulation of surfactants allows for a full application of 18 L-form amino acids into Osprey Active. The addition of supplemental amino acids allows the plant to save energy during periods of stress and can function as normal. By applying early in the season, it is possible to precondition the plant prior to any stress, allowing the plant to work more effectively at lower temperatures. The amino acids help increase chlorophyll concentration in the plant, leading to an increased level of photosynthesis; they also help the leaf stomata function more efficiently, reducing transpiration and plant water loss.



## A unique soil surfactant with the added benefit of increased stress resistance and root stimulation

Osprey Active contains a surfactant blend designed to take both preventative and curative action. It also contains amino acids and rootbooster to further enhance performance.

### Benefits

- Concentrated soil surfactant with unparalleled curative and preventative properties
- Remains 100% active after 30 days, unlike other wetting agents which typically lose up to 20% of their effectiveness
- Applies a full application of amino acids to prevent stress associated with heat and drought
- Contains rootbooster to increase the plants water holding capacity
- Uniform wetting of the rootzone to provide the perfect balance of water to air ratio
- Increased rate of photosynthesis
- Improved seed germination, root development and vigour
- Ideal for links courses as amino acids will help the plant cope with salinity problems
- Exceptional turf safety, non-scorch
- Dew dispersal post application
- Tank mixing options available with the Award range (see the tank mixing compatibility chart on page 19)

## Fairy Ring

Fairy rings are common on all types of turf surfaces and symptoms are most noticeable during dry weather. They are caused by a fungal growth (mycelium) in the soil. This mycelium causes problems in turf as it is water repellent; soil through which a fairy ring has passed may also be rendered water repellent.

The most damaging type of fairy ring, which has zones of both stimulated and dead grass with mushrooms, is the Type 1 fairy ring. A Type 2 fairy ring has mushrooms but only the single zone of stimulated turf. Circles of mushrooms with no associated areas of fast-growing or dead grass are characteristic of a Type 3 fairy ring.

Osprey Active is a dynamic infiltration, new generation soil surfactant formulated from innovative linear surfactants. It is not a fungicide and has no direct effect on the fairy ring. It works by re-wetting the dry areas of turf colonised by fairy ring mycelium which promotes the grass plant to re-grow into areas previous affected by fairy ring and repair damage caused. By not allowing the soil to dry out and become hydrophobic, the surface symptoms and spread of fairy ring is reduced.

## Rootbooster

A unique bio-stimulant which promotes the production of growth hormones, resulting in a significant increase in root hair development by up to 22% and thus increasing the absorption of water and other materials. Rootbooster works in conjunction with the amino acids to increase rootmass. By increasing a plants rootmass (water reservoir), the plant then has the ability to hold and store more water which is vital during periods of drought. This leads to a more drought resilient plant, which is also able to absorb greater quantities of nutrients from the soil and has increased wear tolerance over shallow rooting turf.



Without Rootbooster



With Rootbooster

## Formulations

### Osprey Active Liquid Preventative

Soil surfactants work most effectively when applied monthly. The programme should start early in the spring to precondition the plant and prior to any dry patch forming. This is achieved by applying 20 Ltr/Ha; a second application at the same rate should take place two weeks later to give maximum protection, followed by monthly applications.

### Curative

At the earliest signs of stress apply at 20 Ltr/Ha and repeat every 7 to 10 days until the dry patch is cured. If possible it is advised to carry out aeration at the same time to further assist penetration. Once under control, treat monthly to prevent reoccurrence of the problem.

Pack Sizes:

- 5 Ltr Treats 2500 m<sup>2</sup>
- 20 Ltr Treats 1 Ha
- 120 Ltr Treats 6 Ha
- 200 Ltr Treats 10 Ha

### Osprey Active Granules

Ideal for use in either preventative or curative programmes on greens, tees, hollows, humps and banks. Apply using a conventional fertiliser spreader or by hand; spiking of the turf prior to application will enhance performance. Water after application to wash into the soil.

Pack size: 15 Kg

- Pack coverage 750 m<sup>2</sup>
- 200 Kg per Ha

### Osprey Active Hose End Tablets

Formulated for use through hose end applicators, ideal for hand watering high spots or other areas prone to extreme stress.

Pack size: 6 x 250 gm tablets

- 1 tablet on average will treat 1500 m<sup>2</sup>

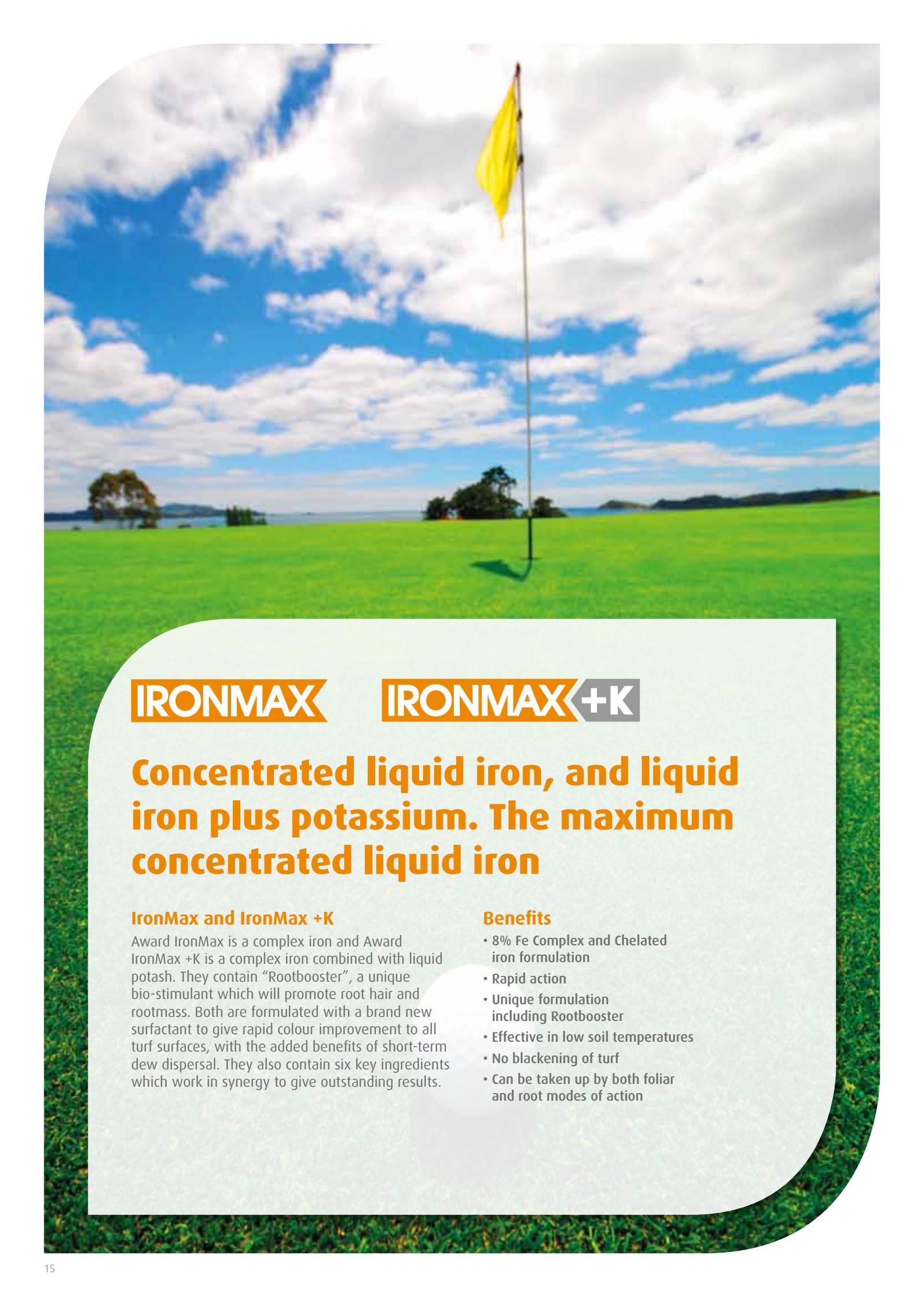
### Osprey Active Irrigation Tank Tablets

3 kg tablet per 2500 litre irrigation tank to treat approximately one hectare. Re-apply every two to three weeks during summer. Coverage is only a guide and is affected by water temperature flow rates and tank size.

Pack size: 1 x 3 kg tablet

## Application

Osprey Active Liquid	Standard rate	Spray volume	Total area
Golf Green	1 Ltr	35 Ltr	500 m <sup>2</sup>
Bowling Green	3 Ltr	105 Ltr	1500 m <sup>2</sup>
Fairways Outfields and Rugby / Football Pitches	10 Ltr 20 Ltr	350 Ltr 700 Ltr	5000 m <sup>2</sup> 1 Ha



**IRONMAX**

**IRONMAX** +K

## Concentrated liquid iron, and liquid iron plus potassium. The maximum concentrated liquid iron

### IronMax and IronMax +K

Award IronMax is a complex iron and Award IronMax +K is a complex iron combined with liquid potash. They contain "Rootbooster", a unique bio-stimulant which will promote root hair and rootmass. Both are formulated with a brand new surfactant to give rapid colour improvement to all turf surfaces, with the added benefits of short-term dew dispersal. They also contain six key ingredients which work in synergy to give outstanding results.

### Benefits

- 8% Fe Complex and Chelated iron formulation
- Rapid action
- Unique formulation including Rootbooster
- Effective in low soil temperatures
- No blackening of turf
- Can be taken up by both foliar and root modes of action

Iron is an essential minor nutrient for the turf grass plant and is required for the synthesis of chlorophyll, giving the plant its natural dark green appearance. Iron is applied extensively for this purpose to “green up” the sward and for hardening turf to discourage disease. Iron is also used by enzymes to regulate transpiration in plants, which is a vital process for the plants movement of nutrients throughout the plant.

Both IronMax and IronMax +K can also be used as part of an integrated disease management approach to control fusarium (snow mould). They act by acidifying the stem base, reducing surface moisture and naturally hardening the plant to resist attack by fusarium.

## Benefits

### Award Iron Max

- Rapid action with excellent longevity (up to 6 weeks)
- Even more effective in cold weather, when grass growth is slow
- Surfactant / iron combination for dew dispersal and hardening to discourage fusarium patch disease
- Rootbooster promotes increased rootmass and root hair development by up to 22%, increasing the plants ability to take up water and nutrients
- Increased drought tolerance and improvement in wear capability
- Safe to operator – no hazard rating for COSHH assessment
- Will not alter acidity and thus worsen dry patch
- Complex iron suitable for use in acidic conditions
- Low sulphur content so will not interact with Black Layer
- Effective all year round especially in winter months
- Contains a micro nutrient package
- Will not harm grass seed when overseeding
- No wheel or footmarks

### Award Iron Max +K (the same as Iron Max plus 6% Potassium)

- Helps rectify potassium deficiencies
- Strengthens cell walls increasing resistance to low temperatures
- Gives maximum hardening of turf
- Regulates the opening and closing of the stomata, which is required for efficient water use

## Application



IronMax and IronMax +K	Standard rate	Spray volume	Total area
Golf Green	1 Ltr 20 Ltr	30 – 50 Ltr 600 – 1000 Ltr	500 m <sup>2</sup> 1 Ha
Bowling Green	3 Ltr	90 – 150 Ltr	1500 m <sup>2</sup>
Fairways Outfields and Rugby / Football Pitches	10 Ltr 20 Ltr	300 – 500 Ltr 600 – 1000 Ltr	5000 m <sup>2</sup> 1 Ha
Pack Coverage	5 Ltr	150 – 250 Ltr	2500 m <sup>2</sup>

- Apply Award IronMax and Award IronMax +K at any time of the year providing the sward is dry and rain is not imminent
- Do not apply during frosty conditions
- For best results cut grass before application
- Repeat every 4-6 weeks or as necessary

Packed in 5 Ltr containers

# Fermos™

**A liquid iron formulated with advanced surfactant for use in the autumn and early spring for rapid greening up and hardening of turf. Fermos also has the added benefit of deterring moss**

## Fermos

Fermos is a complex of iron sulphate and unique surfactants that allow the iron to enter the plant rapidly, but without blackening the turf. Many difficult to control moss species have a very 'tight' structure so an effective surfactant allows penetration of the iron into the moss. Where moss is present it will discolour over a period of a few days. If there is significant moss in the sward it is advisable to scarify or rake out the debris to allow the sward to regenerate and fill the gaps. The application of an autumn and winter fertiliser will further enhance recovery of the grasses.

## Benefits

- Deters moss
- Gives rapid green up
- Hardens turf increasing tolerance to disease and cold stress
- Corrects iron deficiencies
- Reduces the surface pH helping to suppress casting worm activity
- Low application rates
- Economical to use



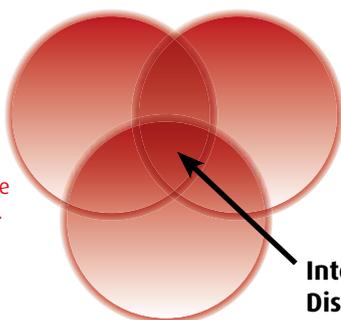
Moss in turf

Moss can become a problem on turf, particularly in shady damp situations. Poor surface drainage and reduced airflow above the turf can result in severe infestation. Turf with moss in does not have such good wear or recovery properties and often suffers with poor playing surfaces in the summer.

With the loss of many of the available worm suppressants there is an increased problem from worm casts on turf. The acidification of the upper root zone can reduce the activity of casting worms. Fermos lowers the surface pH and can be a useful part of an integrated pest management programme.

## Biological

Choosing resistant varieties.  
Maintaining nutrient balance for healthy turf.



## Cultural

Soil aeration.  
Reducing surface humidity.  
Remove shade.

**Chemical  
FERMOS**

**Integrated  
Disease  
Management**

## Application rate:

- 40 litres per Ha in 700 litres of water
- 4 litres per 1000 m<sup>2</sup> in 70 litres of water
- Pack size 5 litres
- Pack coverage 1250 m<sup>2</sup>

# Cleanmax<sup>TM</sup> (HSE 8792)

## A hard surface cleaner and mosskiller

### Cleanmax

Hard surfaces and artificial pitches can become colonised with algae, slimes, lichen, liverworts and moss, especially in shaded situations. These areas can become a safety hazard due to slippery surfaces, making sports activity particularly dangerous.

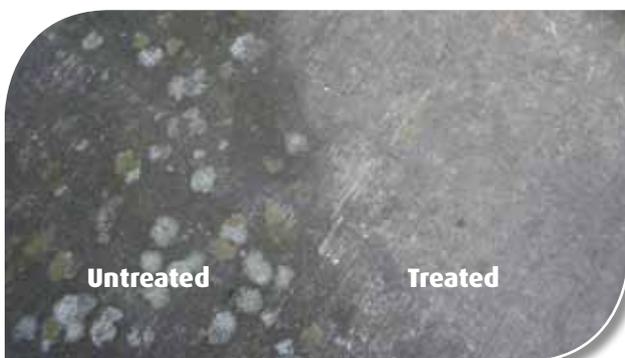
Cleanmax is a blend of organic acids and surfactants that loosen deposits and gives good control of algae, liverwort and toadflax, together with moss, lichen and spleenwort. The rapid acting formulation also ensures fast results. Cleanmax has HSE approval for use on all external hard surfaces.

### Benefits

- Will kill moss
- Cleans and removes algae
- Removes slimes and lichens
- Deters liverworts
- Concentrated formulation
- Brightens up concrete surfaces
- Reduces the risk of slippery surfaces and prevents accidents
- Low application rates
- Lower water rates needed than traditional hard surface cleaners
- Economical to use



Moss on pathway



Lichen on concrete

Hard surfaces can become covered in algae, slime or moss especially in shaded damp conditions resulting in slippery surfaces. Paths can particularly become very dangerous for pedestrian traffic as well as artificial sports surfaces such as tennis courts and astro turf games pitches.

Surfaces suitable to be treated with Cleanmax hard surface cleaner:

Concrete | Asphalt | Tarmac | Block paving | Artificial sports surfaces | Metal / Aluminium frames | Glass panes

### Application:

Do not apply to marble or decorative limestone.

Apply using spraying equipment when no rain is expected and allow to dry thoroughly. If there is significant moss cover, the area may need to be brushed, hosed or pressure washed to remove dead vegetative matter after a couple of days.

- 50 litres per ha in 500 litres of water
- 5 litres per 1000 m<sup>2</sup> in 50 litres of water

Where there is a heavy colonisation of vegetative matter, ensure that the areas are well soaked to achieve complete penetration.

Keep pets and unprotected personnel off the treated areas until thoroughly dry, usually after 3-5 hours.

- Pack size 5 litres
- Pack coverage 1000 m<sup>2</sup>

## Tank mixing compatibility chart

Product	Nutri-Pro 12-0-10	Nutri-Pro 4-2-12	Nutri-Pro 24-0-0	Nutri-Pro 16-2-6	Nutri-Pro Stand Up	Osprey Active	IronMax	IronMax +K	Surf to Turf Triple 30	Surf to Turf 23-0-0	Surf to Turf 14-0-10 +Fe	Surf to Turf 5-0-10 +Fe +Mg
Nutri-Pro 12-0-10	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Nutri-Pro 4-2-12	Green	Green	Green	Green	Green	Green	Red	Red	Green	Green	Green	Red
Nutri-Pro 24-0-0	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Nutri-Pro 16-2-6	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Nutri-Pro Stand Up	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
Osprey Active	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
IronMax	Green	Red	Green	Green	Green	Green	Green	Red	Green	Green	Green	Red
IronMax +K	Green	Red	Green	Green	Green	Green	Red	Green	Green	Green	Green	Red
Surf to Turf Triple 30	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Surf to Turf 23-0-0	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Surf to Turf 14-0-10 +Fe	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
Surf to Turf 5-0-10 +Fe +Mg	Red	Red	Red	Red	Green	Green	Red	Red	Red	Red	Red	Green



Tank mix compatible



Should not be tank mixed

Surf to surf 7% Chelated Iron - is not expected to be tank mix compatible with the above listed products.

Award Fermos - is not tank mix compatible with the above listed products.

Please consult with your Award sales representative for any additional tank mixes.

Manufactures application rates should not be exceeded.

The AWARD range of products is distributed throughout the UK by:

**RICHARD AITKEN  
(SEEDSMEN) LTD**

20 Robert Drive  
Glasgow  
G51 3HE

Tel: 0141 440 0033

[enquiries@aitkens.co.uk](mailto:enquiries@aitkens.co.uk)  
[www.aitkens.co.uk](http://www.aitkens.co.uk)

**AITKENS  
SPORTSTURF LTD**

Aviation Road  
Sherburn in Elmet  
Yorkshire  
LS25 6NB

Tel: 01977 681155

**AVONCROP  
AMENITY PRODUCTS LTD**

Northfield  
Station Road  
Sandford, Winscombe  
N. Somerset BS25 5NX

Tel: 01934 820868

[sales@avoncrop-amenity.com](mailto:sales@avoncrop-amenity.com)  
[www.avoncrop-amenity.com](http://www.avoncrop-amenity.com)

**AVONCROP  
AMENITY PRODUCTS LTD**

2 Millside Park  
Crouch Lane  
Winkfield  
Berkshire SL4 4PX

Tel: 01344 891730

