

Our dedicated staff brings passion and experience to building partnerships, pioneering actionable science & developing the future scientific knowledge to the end user. AGSP is a joint venture of 2 directors having vast experience of Natural raw

material SEAWEED Fertilizer & Animal feed Business at various levels. With the idea to give the best advice on all the benefits of using seaweed for your plants, fruits, vegetables, and animals at a very reasonable price to cover all the sections of society

## Our Objective

Our Mission is very simple to serve society through science, by using natural raw materials. At AGSP, we recognize that we need to inform and educate the use of natural benefits of marine algae on our soils. We will do everything in our power to lead a food system transformation to restore our soils, & improve access to healthy food. The growing challenges of hunger, soil degradation, climate change, and over use of

harsh chemicals demand immediate action

from all of us. That is why we, driven by our of agronomic knowledge, are committed to giving back to the Earth more than we take. Growing a Nature-Positive Food Future, our of the solution and the reinforcement of our purpose to responsibly feed the world and











purpose, science, and many years of expertise new ambition is our commitment to being part protect the planet.









MONARCHA FHEAMAINN ÓIR AN ATLANTAIGH TEORANTA





### Certificate of Analysis

**Product Name: Liquid Seaweed Cold Press** 

Product Description: Green in colour.
High Quality Liquid seaweed is made from 100% Ascophyllum nodosum hand harvested from the west coast of Ireland. The Ascophyllum nodosum contains a natural macro and micro nutrients & Bio active components. The formulation of this product is a green liquid that instantaneously dissolves into water. Low PH 4.5

Constituent	Percentage %
Dry Matter Organic Matter PH Nitrogen Phosphorous Potassium Solubility Formulation odour Appearance	3.90 % w/w 8.12 % w/w 4.5 .1 % w/w .20 % w/w .12 % w/w 99 % Soluble Liquid Marine Light to Medium Green in Colour
Macro Nutrient: Nitrogen (N) Phosphorous (P) Potassium (K)	(w/w %) (%) 0.1% 0.20% 0.12%
Other Components Dry Matter Organic Matter Solubility pH	(w/w %) 3.9 % 8.12% 99.0% 4.5
Bio Active compounds Alginic acid Fucoidan's Mannitol Laminarian's	(w/w %)(minimum Value) 3.18% 0.58% 2.01% 1.17%

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change.

## Liquid Seaweed Cold Press

### (Made from fresh seaweed Ascophyllum nodosum)

This product should only be used at the following rates. Another macro and micro nutrient can be added in, except boron. The ph. of the other Macro and Micro nutrients must be minimum of 4.0-5.5.

AGSP Cold press green liquid is a natural *Ascophyllum nodosum* suspension Concentrate with acidic pH and low sodium content.

Seaweed is processed through a vacuum low-temperature ultra-filtration within 24 hours from harvest to preserve the base materials and maintain an acidic pH in them. Vacuum and ultra-filtration process is non-destructive.

#### Application rates, usage & frequency

Application frequency 20 litres diluted into 1000 litres of water sprayed over 1 hectare as a foliar spray. Amenities, golf courses, turf & pitches every 2-3 weeks depending on soil conditions, precipitation, and UV sun light. When used in countries/ jurisdictions that have lots of UV light, low precipitation, high levels of soil erosion. Application frequency can be weekly in these extreme conditions and Application rates/ amounts can be decreased to 10 litres diluted into 1000 litres of water over 1 hectare.

#### Other Usage Areas

- \* Potatoes
- \* Grassland Silage I Grazing
- \* Root Vegetables:Carrots, Parsnips, Turnips, Swedes & Beetroot
- \* Cereals
- \* Vegetables and Bulbs
- \* Apples
- \* Grapes

#### Application rates, usage & frequency

3-5 litres into 300-500L per/ hectare on the following fruits & vegetables

#### **UOM / Packaging size**

1L 5L 10L 20L 200L, 1000L Handling of product: Please refer to MSDS report (Material Safety Data Sheet.)

#### Storage & Shelf life

This product has a shelf life of 2 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Please make sure this product is stored between 5-30 degrees and kept directly out of sunlight



# Liquid Seaweed Superior 30 Alkaline Extraction

(Made from dried Ascophyllum nodosum Seaweed)

High quality Ascophyllum nodosum hand harvested from the west coast of Ireland to be used on amenities, sports pitches, golf course, and in agriculture as a biostimulant for fruits and vegetables.

#### Benefits of Using Alkaline Extraction

Seaweed-based nutrient blends improve plant growth and yield. However, appropriate amounts of seaweed bio actives are required to achieve higher efficacy levels. Atlantic gold seaweed -based nutrient blends are tailor-made with optimal levels of bio-actives to ensure higher efficacy in terms of plant growth and productivity.

Moreover, complexed nutrients (micro & macro) in the blend will provide essential inputs for a healthy plant development.

#### Application rates, usage & frequency

Application frequency 3-5 litres into 300-500L per/ hectare used as foliar spray for Amenities, golf courses, turf & pitches every 2-3 weeks depending on soil conditions, precipitation, and UV sunlight. When used in countries/ jurisdictions that have lots of UV light, low precipitation, high levels of soil erosion. Application frequency can be weekly in these extreme conditions and Application rates/ amounts can be increased to 10 litres diluted into 1000 litres of water over 1 hectare. Or 1 litre per 100 litre of water

#### Application rates, usage & frequency

3-5 litres into 300-500L per/ hectare on the following fruits & vegetables

#### Other Usage Areas

- \* Potatoes
- \* Grassland Silage I Grazing
- \* Root Vegetables: Carrots, Parsnips, Turnips, Swedes & Beetroot
- \* Cereals
- \* Vegetables and Bulbs
- \* Apples
- \* Grapes

#### **UOM / Packaging size**

1L 5L 10L 20L 200L, 1000L Handling of product: Please refer to MSDS report (Material Safety Data Sheet.)

#### Storage & Shelf life

This product has a shelf life of 2 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Please make sure this product is stored between 5-30 degrees and kept directly out of sunlight



#### Constituent Percentage % **Macro Nutrient: UOM** (%) 0.0% Nitrogen (N) 0.0% Phosphorous (P) 4.0% Potassium (K) Trace elements OUM (ppm) 2700 Magnesium (Mg) Sulphur (S) 8387 Boron (B) Copper (Cu) Iron (Fe) Manganese (Mn Molvbdenum 0.5 2410 Calcium (Ca) Zinc (Zn) Extra Parameters Extra Parameters Dry matter content from Asco 300 grams of dry matter per litre Organic matter 8.5 Specific Gravity 1.15

Certificate of Analysis

Product Description: Dark Black in colour.

Medium PH 7 to 8.5

Product Name: Liquid Seaweed Superior 30 Alkaline Extraction

High quality liquid seaweed made 100% Ascophyllum nodosum hand harvested from the west

coast of Ireland. The Ascophyllum nodosum contains a natural macro, micro nutrients, & Bio

active components. The formulation of this product is liquid based and is 99% soluble in w

Constituent	Percentage %
Bioactive Components:	UOM (%)
Alginic acid	7.0%
Fucoidan	3.0%
Mannitol	4.0%
Amino Acid	0.5%
Extra Parameters	OUM (ppm)
Extra Parameters Dry matter content from Asco	OUM (ppm) 300 grams od dry matter per litre
	41 /
Dry matter content from Asco	300 grams od dry matter per litre
Dry matter content from Asco Organic matter	300 grams od dry matter per litre 16%
Dry matter content from Asco Organic matter pH	300 grams od dry matter per litre 16% 8.5

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change



### Certificate of Analysis

Product Name: Product Name: Atlantic Gold liquid seaweed Superior 30 Aqueous extraction (30% w/v soluble solids)

Product Description: Dark Brown in Colour.

High quality liquid seaweed made 100% Ascophyllum nodosum hand harvested from the west coast of Ireland. The Ascophyllum nodosum contains a natural macro, micro nutrients & Bio active components. The formulation of this product is liquid based and is 99% soluble in water. Low PH 4.5

Constituent	Percentage %
Macro Nutrient: Nitrogen (N) Phosphorous (P) Potassium (K)	<b>UOM (%)</b> 0.2% 0.2% 4.0%
Trace elements Magnesium (Mg) Sulphur (S) Boron (B) Copper (Cu) Iron (Fe) Manganese (Mn) Molybdenum Calcium (Ca) Zinc (Zn)	OUM (ppm) 2700 8387 51 7 65 36 0.5 2410
Bio active Components Alginic acid Fucoidan Mannitol Amino Acids	OUM (ppm) 7% 3% 5% 0.5%
Extra Parameters Dry matter content from Asco Organic matter pH EC	Extra Parameters 300 grams of dry matter per litre 17% 4.5 33027

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change

# Liquid Seaweed Superior 30 Aqueous Extraction (30% w/v soluble solids)

(Made from dried Ascophyllum nodosum Seaweed)

Made from 100% *Ascophyllum nodosum* hand harvested from the west coast of Ireland. The *Ascophyllum nodosum* contains natural macro and micro nutrients & Bioactive components. The formulation of this product is liquid based and is 99% soluble in water.

#### Application rates, usage & frequency

This product should only be used at the following rates. 2-3 litres dissolved and mixed into 200-300 litres of water over 1 hectare. 1 litre represents 1% dilution rate. Maximum 3-4 litres diluted into 1000 litres of water represents.

Apply this amount over 1 hectare every 14 days. (Due to its high concentration of *Ascophyllum nodosum* in this product the best results will be seen by using this product in lower concentration rates more frequently, so depending on weather conditions for instance in a geographical region of high and dry heat this product can be applied in the suggested application rates every 14 days instead of every 21 days.

Application frequency is every 2-3 weeks. With respect to the dilution rates 1 litre diluted into 100 litres of water.

#### Other Usage Areas

- \* Potatoes
- \* Grassland Silage I Grazing
- \* Root Vegetables:Carrots, Parsnips, Turnips, Swedes & Beetroot
- \* Cereals
- \* Vegetables and Bulbs
- \* Apples
- \* Grapes

#### Application rates, usage & frequency

3-5 litres into 300-500L per/ hectare on the following fruits & vegetables

#### UOM / Packaging size

1L 5L 10L 20L 200L, 1000L Handling of product: Please refer to MSDS report (Material Safety Data Sheet.)

#### Storage & Shelf life

This product has a shelf life of 2 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Please make sure this product is stored between 5-30 degrees and kept directly out of sunlight



### Certificate of Analysis

Product Name: Atlantic Gold Seaweed 20% Alkaline Extraction

Product Description: Dark Black in colour.
High quality liquid seaweed made 100% Ascophyllum nodosum hand harvested from the west coast of Ireland. The Ascophyllum nodosum contains natural macro, micro nutrients & Bio active components.
The formulation of this product is liquid based and is 99% soluble in water. Medium PH 8

Constituent	Percentage %
Macro Nutrient: Nitrogen (N) Phosphorous (P) Phosphorous oxide (P205) Potassium (K) Potassium oxide (K20)	UOM (%) 0.52% 0.01% 5.0% 3.0% 3.6%
Trace elements Boron (B) Copper (Cu) Iron (Fe) Zinc (Zn)	0UM (ppm) 135 115 21 <23
Bio active Components Alginic acid Fucoidan Mannitol Amino Acids	OUM (ppm) 1.06% 1.37% 0.11% 1.75%
Extra Parameters Dry matter content from Asco Organic matter pH Specific Gravity Appearance Solubility	Extra Parameters 200 grams of dry matter per litre 27% 10.0 - 11.0 1.12 Black liquid 99.0%

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change

## Liquid Seaweed Superior 20 Alkaline Extraction

(Made from fresh seaweed Ascophyllum nodosum)

High quality *Ascophyllum nodosum* hand harvested from the west coast of Ireland to be used on amenities, sports pitches, golf course, and in agriculture as a biostimulant for fruits and vegetables.

#### Benefits of Using Alkaline Extraction

The cost is the main benefits of using FRESH Alkaline extraction as you are not having to put the seaweed through an extended manufacturing process which costs more to manufacture. The product is then optimised through a series of proprietary formulation steps for improved spread ability, retention and absorption when applied to leaves and roots. Improves soil microbial activity. Suitable for fertigation and mixing with other soil amendments. Fosters proliferation of beneficial microorganisms in the soil and supports vigorous crop establishment. Stress reduction during early stages of seedling growth.

#### Application rates, usage & frequency

Application frequency 3-5 litres into 300-500L per/ hectare used as foliar spray for Amenities, golf courses, turf & pitches and the same for every 2-3 weeks depending on soil conditions, precipitation, and UV sunlight. When used in countries/ jurisdictions that have lots of UV light, low precipitation, high levels of soil erosion. Application frequency can be weekly in these extreme conditions and Application rates/ amounts can be decreased to 10 litres diluted into 1000 litres of water over 1 hectare. Or 1 litre per 100 litre of water

#### Application rates, usage & frequency

3-5 litres into 300-500L per/ hectare on the following fruits & vegetables

#### Other Usage Areas

- \* Potatoes
- \* Grassland Silage | Grazing
- \* Root Vegetables:Carrots, Parsnips, Turnips, Swedes & Beetroot
- \* Cereals
- \* Vegetables and Bulbs
- \* Apples
- \* Grapes

#### UOM / Packaging size

1L 5L 10L 20L 200L, 1000L Handling of product: Please refer to MSDS report (Material Safety Data Sheet.)

#### Storage & Shelf life

This product has a shelf life of 2 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Make sure this product is stored between 5-30 degrees & kept out of sunlight



## Liquid Seaweed Superior 20 Alkaline Extraction

(Made from dried Ascophyllum nodosum Seaweed)

High quality *Ascophyllum nodosum* hand harvested from the west coast of Ireland to be used on amenities, sports pitches, golf course, and in agriculture as a biostimulant for fruits and vegetables.

#### Benefits of Using Alkaline Extraction

Seaweed-based nutrient manufactured by adopting a highly efficient extraction process and then concentrated by multiphase evaporation. This combination of processes results in the most highly concentrated Ascophyllum nodosum seaweed extract on the market, with low viscosity and excellent solubility, while maintaining the key functionality of bioactive for plant priming. The product is then optimised through a series of proprietary formulation steps for improved spread ability, retention and absorption when applied to leaves and roots

#### Application rates, usage & frequency

Application frequency 3-5 litres into 300-500L per/ hectare used as foliar spray for Amenities, golf courses, turf & pitches and the same for every 2-3 weeks depending on soil conditions, precipitation, and UV sunlight. When used in countries/ jurisdictions that have lots of UV light, low precipitation, high levels of soil erosion. Application frequency can be weekly in these extreme conditions and Application rates/ amounts can be decreased to 10 litres diluted into 1000 litres of water over 1 hectare. Or 1 litre per

#### Application rates, usage & frequency

100 litre of water

3-5 litres into 300-500L per/ hectare on the following fruits & vegetables

#### Other Usage Areas

- \* Potatoes
- \* Grassland Silage I Grazing
- \* Root Vegetables:Carrots, Parsnips, Turnips, Swedes & Beetroot
- \* Cereals
- \* Vegetables and Bulbs
- \* Apples

#### UOM / Packaging size

1L 5L 10L 20L 200L, 1000L Handling of product: Please refer to MSDS report (Material Safety Data Sheet.)

#### Storage & Shelf life

This product has a shelf life of 2 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Please make sure this product is stored between 5-30 degrees and kept directly out of sunlight

### Certificate of Analysis

Product Name: Liquid Seaweed Superior 20 Alkaline Extraction

Product Description: Dark Black in colour.

High quality liquid seaweed made 100% Ascophyllum nodosum hand harvested from the west coast of Ireland. The Ascophyllum Nodosum contains natural macro, micro nutrients & Bio active components. The formulation of this product is liquid based and is 99% soluble in water. Medium PH 6.8 to 8

Constituent	Percentage %
Macro Nutrient: Nitrogen (N) Phosphorous (P) Phosphorous oxide (K20) Potassium (K) Potassium oxide (K20)	UOM (%) 10.0% 2.0% 5.0% 5.0% 6.0%
Trace elements Magnesium (Mg) Boron (B) Copper (Cu) Manganese (Mn) Zinc (Zn)	OUM (ppm) 135 135 135 135 100
Extra Parameters Dry matter content from Asco Organic matter pH Specific Gravity	Extra Parameters 300 grams of dry matter per litre 25.00% 8. 1.23

Constituent	Percentage %
Bioactive Components:	UOM (%)
Alginic acid	11.0%
Fucoidan	2.0%
Mannitol	3.0%
Amino Acid	0.5%
Extra Parameters	OUM (ppm)
Dry matter content from Asco	300 grams od dry matter per litre
Dry matter content from Asco Organic matter	300 grams od dry matter per litre 25%
′	, ,
Organic matter	25%
Organic matter pH	25% 8.0

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change

### Certificate of Analysis

Product Name: Atlantic Gold Seaweed Natural Soil Conditioner (AGSNSC)

Product Description: Green/Brown in colour

100 % High quality seaweed Meal made from Ascophyllum nodosum hand harvested from the west coast of IrelandDried at low temperature to preserve all the macronutrients and micronutrients through the drying process to ensure that the enzyme is not destroyed. Medium PH 5.7 - 8.0

	100
Constituent	Min-Max %
Organic Matter (OM)	89.0 % - 94.0%
Macro Nutrients: Nitrogen (N) Phosphorous (P) Potassium (K)	0.6% - 3.0% 0.1% - 2.0% 2.0% - 5.0%
Macro Nutrients: Calcium (Ca) Magnesium Proteins Alginates Sodium (Na)	1.0% - 4.0% 0.5% - 2.0% 5.0% - 12.0% 16.0% - 25% 2.0% - 12.0%
Moisture content Ascophyllum nodosum - concentration - pH Appearance / Colour	100% 5.7 - 8.0 Light green & yellow in colour

Particle Size:	The follow	ing sizes are	offered:
Product Micron Size	6/20	10/20	20/60
Millimetres:	3350-850	1940-850	850-250
Packaging:	Packed in r PE 25kg ba	netric tonne gs x 40/pall	bags or et

Golf greens, sports turf	25kg bag per 500 square metres EVERY 2-3 Months depending on Temperature and soil conditions
Lawns and grasses	5kg per 100 square metres, 50-75g per square metre (Apply Spring and Autumn) 2 Twice in Spring and 2 Twice in Autumn
Well-structured top soils	25 - 50kg per 500 square metres EVERY 3-4 Months depending on Temperature and soil conditions
Poorly structured top soils	50 - 75kg per 500 square metres EVERY 6 weeks - 2 Months depending on Temperature and soil conditions
Sub soil	75 - 150kg per 500 square metres
Compost	1-part soil conditioner to 50 parts composts during maturation period
Vegetables	100 - 150g per square metre
Flowers, shrubs	100 - 150g per square metre
Typical Analysis	
Nitrogen Phosphorus Potassium Calcium Magnesium Alginates Proteins	0.6 - 2% 0.1 - 0.3% 2 - 3% 1 - 3% 0.5 - 1% 16 - 25% 5 - 10%

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change



# 06

# Natural Seaweed Soil Conditioner

### (Made from dried Ascophyllum nodosum Seaweed)

#### About

We retain all macronutrients and micronutrients through the drying process to ensure that the enzyme is not destroyed. This makes our seaweed granular dietary products unique, whether it is natural liquid bio-stimulation fertilizers or natural granular soil conditioners and animal feed.

We need to keep these enzymes/proteins as catalysts in living cells. Catalysts increase the rate at which chemical reactions occur without self-consumption or permanent changes, helping to provide plants, animals with better growth, and health. *Ascophyllum nodosum* Seaweed contains more than 60 trace minerals that are completely natural.

The key to seaweed is very simple, small amounts but often. You can use seaweed granulated meal for a slow release.

### General Analysis on Seaweed meal (Fertilizer/Soil Conditioner)

- Large amount of insoluble carbohydrates in *Ascophyllum nodosum* acts as soil conditioners (improves aeration & soil structure, especially in clay soils).
- Good moisture retention properties.
- Powdered Ascophyllum nodosum may be composted for 11-12 days and may be easily stored. This may be added to water and sprayed on steep slopes (which are

difficult to compost) which may lose soil by water run-off. The composted seaweed sticks to the slopes and holds any soil in place; it also retains enough moisture to allow seeds to germinate.

- Apply to fruit, vegetables, and flower crops for
- 1. Increased yield.
- 2. Improved soil germination.
- 3. Increased uptake of soil nutrients.
- 4. Increased resistance to pests/insects.
- 5. Resistance to frost.
- 6. 100% Natural

#### UOM / Packaging size

Particle Size: The following sizes are offered Product Micron Size: 6/20 10/20 20/60 Millimetres: 3350- 850 1940-850 850-250 Packaging: Packed in metric tonne bags or PE 20Kg bags x 50/Pallet

#### Storage & Shelf life

This product has a shelf life of 10 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Please make sure this product is stored between 5-30 degrees and kept directly out of sunlight

### Certificate of Analysis

Product Name: Atlantic Gold Seaweed Water Dissolvable powder Made from an Alkaline Extraction

Product Description: Green in colour.

Dark Black Granular

High Quality dissolvable powder made from seaweed made from seaweed Ascophyllum nodosum. Made from 100% Ascophyllum nodosum hand harvested from the west coast of Ireland. The Ascophyllum nodosum contains natural macro, micro nutrients & Bio active components. The formulation of this product is a black micro granular crystal that instantaneously dissolves into water. Medium PH 9.5

Constituent	Percentage %
Dry Matter Organic Matter PH Nitrogen Phosphorous Potassium Solubility Formulation odour Appearance	3.90 % w/w 8.12 % w/w 4.5 .1 % w/w .20 % w/w .12 % w/w 99 % Soluble Liquid Marine Light to Medium Green in Colour
Macro Nutrient: Nitrogen (N) Phosphorous (P) Potassium (K)	(w/w %) (%) 0.1% 0.20% 0.12%
Other Components Dry Matter Organic Matter Solubility pH	(w/w %) 3.9 % 8.12% 99.0% 4.5
Bio Active compounds Alginic acid Fucoidan's Mannitol Laminarian's	(w/w %)(minimum Value) 3.18% 0.58% 2.01% 1.17%

Constituent	Percentage %
Dry Matter	95.00 % w/w
Organic Matter	53.00 % w/w
PH	9.5 % w/w
Potassium (K)	15.8 % w/w
Potassium oxide (K20)	19.00 % w/w
Solubility	99 % Soluble powder
Formulation	Black micro granular crystals

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change



# 07

## Water Dissolvable Powder Alkaline Extraction

(Made from dried Ascophyllum nodosum Seaweed)

### The Benefits of using 99.9% soluble spray dried powder of Ascophyllum nodosum extract

Our Seaweed Powder can be applied as a foliar application or through irrigation to provide nutritional support, prevent or correct potash nutrient deficiencies that could limit growth and yields, and improve crop quality. It is suitable for crops of all kinds including conventional, organic, turf, and ornamental.

99.9% soluble spray dried powder of Ascophyllum nodosum extract. A proprietary agglomeration step is used during the manufacture in which the native particles are further assembled to form bigger agglomerates, while preserving the bioactive in the final product.

This makes Seaweed Powder unique that is highly soluble and dispersible in water, with enhanced spraying ability and tank mix compatibility. In general Seaweed Powder needs to be applied to the root zone, twice at 7-to-14-day intervals, after seedling emergence.

This will benefit root and shoot growth establishment at the early stages of crop development. The enriched seaweed bioactive formula will boost the crop's ability to withstand plant stresses.

#### Application rates, usage & frequency

This product should only be used at the following rates.

1Kg represents 0.1% dilution. Maximum 3kg per 1000L or 0.3% dilution per hectare. suitable for all tank mix except low pH product (ph4).

This product will induce early blooming in fruits and vegetables. Application frequency is every 2-3 weeks.

#### UOM / Packaging size

20 Kilo per box. 54 boxes per Pallet.

#### Storage & Shelf life

This product has a shelf life of 3 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture as it will absorb the moisture. Please makes after opening packaging it is resealed to prevent any moisture from entering and being absorbed by the dissolvable powder.

#### Amenities, golf courses, turf & pitches

1 kilo dissolved and mixed into 1000 litres of water over 1 hectare.
1 Kilo represents 1% dilution rate.
Maximum amount 10 kilos diluted into 1000 litres of water represents a 10% dilution rate. Another macro and micro nutrient can be added in, except boron. The ph. of the other Macro and Micro nutrients must be a minimum of 8.5 -10.5 ph. Application frequency is every 2-3 weeks.



## Certificate of Analysis

Product Name: Atlantic Gold Fresh Frozen Seaweed Meal FBAM

Product Description: Green in colour

FBAM is made from 100% Ascophyllum nodosum hand harvested from the west coast of Ireland. The Ascophyllum nodosum contains a natural macro and micronutrients. The formulation of this product is a green freeze-dried seaweed meal. The Ascophyllum nodosum contains natural macro, micro nutrients & Bio active components. The formulation of this product is a green liquid that instantaneously dissolves into water. Low PH 4.5

Constituent	Percentage %
Macro Nutrient: Nitrogen (N) Phosphorous (P) Potassium (K) Potassium oxide (K20)	UOM (%) 0.0% 0.12% 2.0% 2.4%
Trace elements Calcium (ca) Magnesium (mg) Sodium (Na) Protein	OUM (ppm) 1.5% 0.7% 4.8%
Heavy Metals Iron (Fe) Manganese (Mn) Zinc (Zn) Copper (Cu)	OUM (ppm) 205 ppm 24 ppm 26 ppm 2.6 ppm
Other Components Dry matter content from Asco Organic matter Moisture	(w/w %) 85.0% 66.0% 14.3%



Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change

## Fresh Frozen Seaweed Meal FBAM

### (Made from dried Ascophyllum nodosum Seaweed)

This is a natural *Ascophyllum nodosum* Seaweed Chopped and is processed through a decanter centrifuge system. It is then put through a Double effect evaporator with a force circulation pump that is suitable for low temperature vacuum concentration of heat sensitive materials such as seaweed. This is done within 24 hours from harvest to preserve the base materials and maintain the nutrients within the seaweed wall. Vacuum and ultra-filtration process is non-destructive.

#### About

Fresh Frozen Animal Feed is a totally natural multimineral supplement. It has a wide variety of readily absorbed naturally balanced minerals, trace elements, amino acids and vitamins. Animal Feed contains all the minerals and trace elements an animal requires for a normal healthy life. Being totally natural and of vegetable origin it is easily digested and is safe to feed to animals of all

#### Principal advantages of seaweed in animal feed

- 1.Builds resistance to disease by ensuring a complete balance of micronutrients
- 2.Organic trace elements more readily assimilated than in synthetic form
- 3.Assists nutrient absorption, healthy growth and animal performance
- 4. Provides essential roughage maintaining healthy intestinal function

#### UOM / Packaging size

20kg Frozen Block Slabs x 50 Block per pallet (Please Note: We can put another 10 Block Frozen Slabs on a pallet if required )

#### Benefits of Fresh Frozen Seaweed Meal

All natural vitamins are organic food substances found only in living things, that is, plants and animals. With few exceptions, the animal's body cannot manufacture or synthesize vitamins. They must be supplied by the diet or in dietary supplements. Vitamins are essential to the normal functioning of an animal's body. They are necessary for the growth, vitality, health and general well being, and for the prevention and cure of many health problems and diseases. Vitamins regulate metabolism, help convert fat and carbohydrates into energy, and assist in forming bone and tissue. The nutritional value of seaweed is based on its contribution of minerals, trace elements and vitamins to the diet of animals. Animal feed brings the best of nature's harvest to livestock management.

#### Storage & Shelf life

This product has a shelf life of 3 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Please make sure this product is stored between 5-30 degrees and kept directly out of sunlight

### Certificate of Analysis

Product Name: Atlantic Gold Seaweed Natural Animal Feed (AGSNAF)

Product Description: Green/Brown in colour 100 % High quality seaweed Meal made from Ascophyllum nodosum hand harvested from the west coast of IrelandDried at low temperature to preserve all the macronutrients and micronutrients through the drying process to ensure that the enzyme is not destroyed Atlantic Gold Seaweed Ascophyllum nodosum brown macroalgae (seaweed) is providing prebiotic fibres that improve microbiome balance and digestive efficiency in animals by selectively targeting beneficial gut bacteria. Medium PH 5.7 – 8.0

	The second second		AND DESCRIPTION OF THE PARTY OF	
Pacommano	ad caswag	d food a	onlication ner	day

Constituent	Min-Max %
Organic Matter (OM)	89.0 % - 94.0%
Macro Nutrients: Nitrogen (N) Phosphorous (P) Potassium (K)	0.6% - 3.0% 0.1% - 1.0% 1.0% - 3.0%
Macro Nutrients: Calcium (Ca) Magnesium Proteins Alginates Sodium (Na)	1.0% - 4.0% 0.5% - 2.0% 5.0% - 12.0% 16.0% - 25% 2.0% - 12.0%
Moisture content Ascophyllum nodosum - concentration - pH Appearance / Colour	100% n/a Light green & yellow in colour
Particle Size:	The following sizes are offered:
Product Micron Size	6/20 10/20 20/60
Millimetres:	3350-850 1940-850 850-250
Packaging:	Packed in metric tonne bags or PE 25kg bags x 40/pallet

Horses Stress periods Maintenance 60/70 g per day 100/120g per day 60/70 g per day  Mares Serving/in foal 100g per day  Young Stock Maintenance Stress periods 0.1% of bodyweight 0.1% of bodyweight  Stallions At stud 120/150g per day  Dairy Cows High yielder Calving/bulling Calves 70g per day 100/120g per day 60/70g per day (3-6 weeks prior to lambing) 60/70g per day (3 weeks after lambing) 60/70g per day  Goats Maintenance Milking 35g per day 60/70g per day  Poultry 25kg per tonne of meal					
Young Stock  Maintenance Stress periods  Stallions  At stud  Dairy Cows  Average yielder High yielder Calving/bulling Calves  Maintenance Calving/bulling Calves  Maintenance Calving/bulling Calves  Maintenance Calving/bulling Tomps/Rams Ewes  Tups/Rams Ewes  Maintenance 60/70g per day 60/70g per day (3-6 weeks prior to lambing) 60/70g per day (3 weeks after lambing)  Goats  Maintenance Milking  Z5kg per tonne of meal	Но	lorses	Stress periods	100/120g per day	
Stress periods  Stress periods  O.1% of bodyweight  120/150g per day  120/150g per day  100g per day 120/150g per day 120/120g per day 120/120	Ma	Mares	Serving/in foal	100g per day	
Dairy Cows  Average yielder High yielder Calving/bulling Calves  Beef Cows  Maintenance Calving/bulling  Sheep  Tups/Rams Ewes  Tups/Rams Ewes  Maintenance 60/70g per day 100/120g per day 60/70g per day (3-6 weeks prior to lambing) 60/70g per day (3 weeks after lambing) 60/70g per day 25kg per tonne of meal	Yo	oung Stock	mamee		
High yielder Calving/bulling Calves 120/150g per day 100/120g per day 100/120g per day 70g per day 100/120g per day 60/70g per day (3-6 weeks prior to lambing) 60/70g per day (3 weeks after lambing) 60/70g per day (3 weeks after lambing) 60/70g per day 25kg per tonne of meal	St	tallions	At stud	120/150g per day	è
Calving/bulling 100/120g per day  Sheep Tups/Rams	Da	airy Cows	High yielder Calving/bulling	120/150g per day 100/120g per day	
Ewes 60/70g per day (3-6 weeks prior to lambing) 60/70g per day (3 weeks after lambing)  Goats Maintenance Milking 35g per day 60/70g per day  Poultry 25kg per tonne of meal	Be	Seef Cows			
Milking 60/70g per day  Poultry 25kg per tonne of meal	Sh	heep		60/70g per day (3-6 weeks prior to lambing)	
31	Go	ioats	····a····c···a···cc		
D	Po	oultry		25kg per tonne of meal	
Dogs 2 leaspoons per day	Do	)ogs		2 Teaspoons per day	
Cats 1 Teaspoon per day	Ca	ats		1 Teaspoon per day	
Smaller Pets 1/2 to 1/4 Teaspoon Depending on pet	Sn	maller Pets		1/2 to 1/4 Teaspoon Depending on pet	

Note: Batches of Ascophyllum nodosum will vary from batch to batch and month to month no batch is ever the same. Thus, the Bio active components will constantly change





## Seaweed Natural Animal Feed (AGSNAF)

(Made from dried Ascophyllum nodosum Seaweed)

Atlantic gold seaweed Animal feed material as part of their diet, livestock, show animals and pets will receive most of their nutritional needs from one rich, all-natural source. Every animal depends upon a steady, reliable source of nutrients to maintain overall health and wellbeing. The brown seaweed in Irish kelp meal (Ascophyllum nodosum) has proven time and again, through scientific research and tradition, to improve the health and performance of animals. By using brown Ascophyllum nodosum seaweed you are Increasing the diversity and abundance of beneficial, butyrate-producing intestinal bacteria.

#### About

We retain all macronutrients and micronutrients through the drying process to ensure that the enzyme is not destroyed. This makes our seaweed granular dietary products unique, for animal feed.

We need to keep these enzymes/proteins as catalysts in living cells. Catalysts increase the rate at which chemical reactions occur without self-consumption or permanent changes, helping to provide plants, animals with better growth, and health. Ascophyllum nodosum Seaweed contains more than 60 trace minerals that are completely natural.

The key to seaweed is very simple, small amounts but

#### UOM / Packaging size

Particle Size: The following sizes are offered Product Micron Size: 6/20 10/20 20/60 Millimetres: 3350-850 1940-850 850-250 Packaging: Packed in metric tonne bags or PE 20Kg

bags x 50/Pallet

#### Benefits of Fresh Frozen Seaweed Meal

All natural vitamins are organic food substances found only in living things, that is, plants and animals. With few exceptions, the animal's body cannot manufacture or synthesize vitamins. They must be supplied by the diet or in dietary supplements. Vitamins are essential to the normal functioning of an animal's body. They are necessary for the growth, vitality, health and general well being, and for the prevention and cure of many health problems and diseases. Vitamins regulate metabolism, help convert fat and carbohydrates into energy, and assist in forming bone and tissue. The nutritional value of seaweed is based on its contribution of minerals, trace elements and vitamins to the diet of animals. Animal feed brings the best of nature's harvest to livestock management.

#### Storage & Shelf life

This product has a shelf life of 3 years. Please store in a dry enclosed place. Make sure when the packaging is open it is not left open and exposed to moisture. Please make sure this product is stored between 5-30 degrees and kept directly out of sunlight

# Seaweed Natural Animal 09 Feed (AGSNAF)

(Made from dried Ascophyllum nodosum Seaweed)

100 % High quality seaweed meal made from *Ascophyllum nodosum* hand harvested from the west coast of Ireland.

Composition per 100g:	(Average %)	Vitamins:	(Parts per billion - ppb)
Carbohydrate	56%	A Retinol	22
Dietary Fibre	51%	B1 Thiamine	11.5
Protein	5%	B2 Riboflavin	5
Fat	5%	B3 Niacin	5
Sugar	1%	B6 Pyridoxine	21.5
Alginic Acid	15-26%	B12 Cobalamin	6
Ash	18%	Vitamin C	9
Moisture	10-15%	Vitamin D	82
		Vitamin E	150
Minerals and Elements:		Vitamin K	2.79
Ca Calcium	2.60%	Amino Acids	
P Phosphorus	0.30%		
Mg. Magnesium	0.85%	Alanine	6.00%
N Nitrogen	1.50%	Arginine	8.50%
K Potassium	2.80%	Cystine	2.50%
Na Sodium	2%	Glycine	4.40%
S Sulphur	2.2%	Proline	7.80%
	(Parts per million - ppm)	Serine	11.70%
B Boron	96	Taurine	1,80%
Cr Chromium	0.7	Thiamine	5.5%
Co Cobalt	3	Tyrosine	3.00%
Cu Copperl	3		
l lodine	706	Bio active compounds	
Fe Iron	602	A1	240/
Mn Manganese	02	Alginates	21%
Mo Molybdenum	1.8	Fucoidans	9%
Sn Selenium	0.5	Laminaria	10%
Zn Zinc	12	Mannitol	12%



## **Epilogue**



### Key facts about seaweed:

- Most of the world's oxygen (about 70%) comes from seaweeds and other microscopic algae.
- Seaweeds support primary production levels that are 6-10 times greater than the most intensive land-based agricultural systems.
- **3.** There are 9 times more seaweeds in the oceans than there are plants on the land.
- **4.** There are over 12,000 species of seaweeds, al with different sizes and colours.
- **5.** Seaweeds are used in human foods, medicine, and cosmetics, as well as in animal feeds and are excellent fertilizer because they soak up micronu trients and antioxidants from clean water.

Seaweed is thought to have first come about approximately three and half billion years ago. We humans have realised seaweed benefits many thousands of years ago, as archaeological records show. In Japan, the past 2,000 years have seen many seaweed uses, and it is clear from the literature that the Japanese were aware of the many benefits all that time ago.

This is why this sea vegetable is used in so many lifferent markets and is considered a superfood or both Humans Animal, and Plants

#### **Contact Us**



Mr Gabriel Keenan
Atlantic Gold Seaweed Plant Ltd
Derroe
Ballinahown
Connemara
Co. Galway
H91 YCK8
Ireland

**Telephone:** +353 (0) 91 398205 **Mobile:** +353 (0) 83 333 8885 **Direct Email:** gabriel@atlanticgold.ie

**Enquiries:** sales@atlanticgold.ie

Corporate: Registered in Ireland.

Company Reg (CRO): 741390