

GROWGREEN SPECIFICATION –AMINOKELP PREMIUM LIQUID FERTILISER

Grow Green Item Code	AKelpPremium -1000, AKelpPremium - 20,		
Manufacturer / Supplier	GrowGreen, Technologies 6089 Cunningham Highway, Kalbar, Queensland 4309		
Product Description:	AminoKelp Premium is an Organic liquid biofertiliser that has been made after the microbial digestion of selected marine waste and different species of seaweed. The unique technology of GrowGreen ensures the formation of high quality amino acids as well as plant beneficial carbohydrates that will supply plant requirements during their complete development.		
Product Intended Use:	<p>The product is a fertiliser that can be used as a foliar spray application, through a drip irrigation system, or via fertigation through both pivot and large sprinkler application.</p> <p>GrowGreen AminoKelp Premium will deliver essential plant nutrients that are needed to complete all plant metabolic processes. During manufacturing the product is not heat treated; this means that the amino acids are present as an "L" form which is the preferred form for plants. The gentle extraction of AminoKelp Premium's seaweed extracts will also benefit and enhance plant performance and yield.</p>		
Product Legality:	This product complies with the standards as outlined by the Fertiliser Industry Federation of Australia (FIFA). It complies with the Fertiliser Working Group (FWG) Code of Practice (COD) as outlined in the latest version dated March 2011. FWG is convened by the Australian Government Department of Agriculture Fisheries and Forestry and includes representatives of the States, CSIRO, and Food Standards Australia New Zealand.		
Ingredient Listing on retail pack:	Active Constituents are not required to be listed. However the front of the pack should state "Microbially active and that the product has Amino Acids, trace elements (as listed below) and micro nutrients (also listed below)		
Raw Material Listing (composition and ingredients not required on pack)	Fish silage < 90%, Plant macro and micro nutrients < 5%, Kelp <1.2% and water to 100%.		
Origin statement	Manufactured in Australia using local and imported ingredients.		
Shelf Life:	Best used within 12 months of manufacture date. However, the product can last much longer if stored in the correct conditions.		
Recommended Storage	<p>Store in a well-lit area. Do not store in the dark or below 10 °C as microbes will become dormant. Ideally store between 15-30 °C.</p> <p>Product should not be diluted until it's ready to be used as microbes will multiply when water is added.</p>		
Recommended Transportation requirement	Depending on pack size, product should be stacked on pallets and shrink wrapped to minimize bottle/container movement.		
Testing:	Parameter	Acceptable Level	Test Method
	Colour	Yellow to Dark Brown/ light brown liquid.	Visual inspection

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	Defects	No foreign material No excessive suspended elements.	Visually inspect, ensure it carries through sieve of 62 microns. Random testing
Chemical	Specific gravity	1.20% @ 25 °C	Meter reading
	pH value	2 to 4.5	pH meter reading
	Soluble in water	Yes	Water based suspension
Microbiological	Active	Y	
	Yeast & Mould	Y	
Organoleptic	Aroma	Slight fish odour.	
	Texture	Liquid with suspended solids Note: Some Solids may precipitate with time. If so the material should be agitated and sieved prior to application	

Packaging			
Primary (Retail pack)	20 litre white bottles. 1000 litre IBC's.		
Pallet	For 20 litre bottles: 16 Units per layer / 3 layers high. For 1000 litre IBCs: 1 unit per layer/one layer high.		
	Maximum pallet height = 1.2m		
	Primary Unit	Secondary unit (Packaging)	Pallet
Nett / Gross Weight	20 litre = 1000 litre =	0.60 kg 50 kg	1,180 kg 1,250 kg
Coding Information			
EAN barcode Number	N/A		
TUN Number	N/A		
Date Code / Traceability	Each batch is allocated a number – which is also used as a manufacturing date code.		
Product Label	Each product pack size has a standard Brand Label – with only the pack size being different.		
Pallet Label	No pallet code labels are required unless requested.		

Tamper Evidence	IBCs must have a tamper proof zip. All other packs have twisted lids with no seals.
Pallet Protection	Not required.

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Standard Information	Component	As	level
Typical Analysis (Weighted volume) and Properties	Nitrogen (N)	Protein	0.2-0.45%
	Phosphorus (P)	Protein	0.05-0.15%
	Potassium (K)	molasses	0.1-0.3%
	Sulphur (S)	Protein	0.15-0.3%
Warning statements required for the presence of specific substances in products	Nil		
Warning or advisory statements.	<ul style="list-style-type: none"> • Avoid spraying in above 30 °C temperatures. • Application rates as listed below. • Warranty statement. • Handling and storage statement. 		
Does this product use or have GM components	Non Genetically modified Components		

Declarations to be on labels or Packaging	
Regulatory Declarations	Name of product, Analysis (W/V) – for minimum levels of nutrients (per COP), Directions for use and compatibility, Application rates, Volume, Country of origin, Name & address of supplier / manufacturer, Benefits statement, Warranty statement, Website.
Warranty statement	GrowGreen Pty Ltd makes no express or implied warranty regarding the storage, handling, use or results obtained from using this product excluding statutory warranties).

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<p>Claims or benefits that can be made.</p>	<ul style="list-style-type: none"> • Natural source of plant beneficial carbohydrates and amino acids. • A balanced, microbially digested product for optimum uptake & availability. • Available immediately through the leaf and plant roots with nil withholding period. • Inoculates the soil with the essential beneficial microbes necessary for good soil health & structure that plants need for their development and productivity, with the added benefits in making locked up plant nutrients. • All by-products of microbial digestion, such as enzymes, auxins and vitamins are preserved and available to the plant • Works through irrigation, drip systems and foliar sprays with greater than 80 micron orifice/jet size. • Improves the stress tolerance levels of the plant. • Improves fruit flavour, colour, uniformity and size. • Enhances the natural pest and disease resistance in the plant. • Supplies organic nitrogen to the plant and the soil. • Enhances the uptake and assimilation of trace minerals to rapidly correct minor micronutrient deficiencies.
<p>Directions for Use inclusions</p>	<p>Use with Xtend Plant Oil Adjuvant at 2 ml per litre of water Always check for compatibility with insecticides or herbicides. We recommend testing the mixture on a small area prior to wide spread application</p>

Application Rates

Crop	Application Rate	Number of applications
Horticultural crops	3-4 ltrs	3-4 foliar applications. Pre flowering, post flowering and fruit enlargement stage
Broad acre and winter crops	2-3 ltrs	2 foliar applications. Mid tillering and booting and grain filling stage
Annual and perennial pasture	3-4 ltrs	3-4 foliar applications post grazing

Export / Import Information			
	Animal or Animal derivative	Y	Yes Digested Marine Waste Not to be used with ruminant animals in Australia or NZ
	Yeast or Yeast Product	Y	Fully digested.
	Microbially	Y	

Authorization

Name	Position	Date

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Dr Pau Vila	Technical Manager	25-01-19
Mario Parnis	Director / Technical Advice	25-01-19

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