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Material Safety Data Sheet for KELP-P-MAX™

COMPANY DETAILS

Name	Omnia	Emergency telephone no.	+27 16 970 7281 or 083 421 9177
Address	P.O. BOX 384 Sasolburg 1947 Free State South Africa	Official Advisory Body	+27 11 375 5911
Tel	+27 16 970 7281 or +27 16 970 7200 (office hours)	Fax	+27 16 976 1924

1. PRODUCT AND COMPANY IDENTIFICATION

Trade name:	KELP-P-MAX™	Chemical abstract no.:	Not applicable
Chemical family:	Compound therefore not applicable	NIOSH no.:	Not applicable
Chemical name:	Compound therefore not applicable	Hazchem code:	Considered non hazardous for transport in South Africa
Synonyms:	Not applicable	UN no.:	None

2. COMPOSITION

Compound	CAS number	SABS S.I.N. number	SABS class	IARC list	EU symbol	Risk and safety phrases
water	7732-18-5	Not listed	Not listed	Not listed	Not listed	Not listed
(NH4)2HPO4	7783-28-0	Not listed	Not listed	Not listed	Not listed	Not listed
NH4H2PO4	7722-76-1	Not listed	Not listed	Not listed	Not listed	Not listed
FeNH4EDTA	unknown	Not listed	Not listed	Not listed	Not listed	Not listed
MnEDTA	15375-84-5	Not listed	Not listed	Not listed	Not listed	Not listed
ZnEDTA	14025-21-9	Not listed	Not listed	Not listed	Not listed	Not listed
CuEDTA	14025-15-1	Not listed	Not listed	Not listed	Not listed	Not listed
Sodium octaborate tetra hydrate	12280-03-4	Unknown	6.1	Not listed	Not listed	Not listed
Sodium Molibdate	10102-40-6	Not listed	Not listed	Not listed	Not listed	Not listed
Na2SO4	7757-82-6	Not listed	Not listed	Not listed	Not listed	Not listed

3. HAZARDS IDENTIFICATION

Main Hazard:	Harmful if ingested.
Flammability:	Not flammable
Chemical hazard:	None
Biological hazard:	Harmful if ingested.
Reproductive hazard:	May be a reproductive hazard.
Health effects – eyes:	May irritate the eyes.
Health effects – skin:	May irritate the skin
Health effects - ingestion	Ingestion is harmful and may be fatal.
Health effects – inhalation:	An irritant.
Carcinogenicity:	May be carcinogenic
Mutagenicity:	May be mutagenic.
Neurotoxicity:	May effect the central nervous system

NIO= No information found

4. FIRST-AID MEASURES

Product in eye:	Immediately irrigate the eyes with eyewash solution or clean water for at least 15 minutes. Continue intermittent irrigation until medical attention can be obtained. Hold eyelids open during flushing.
Product on skin:	Remove contaminated clothing and wash the affected skin with plenty of water. Obtain medical attention.
Product ingested:	Do not induce vomiting. Give water to drink. Obtain medical attention immediately.
Product inhaled:	Move the injured person to fresh air at once. If not breathing give artificial respiration. If breathing difficult, give oxygen. Keep the patient warm and at rest. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing media:	Use any means suitable to extinguish surrounding fire.
Special hazards:	Release of toxic metallic, NO _x , CO _x , SO _x and NH ₃ gasses.
Protective clothing:	Wear self-contained breathing apparatus and full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Put on protective equipment before entering danger area. (See Section 8.)
Environmental precautions:	Take care to avoid the contamination of watercourses and drains. Inform the appropriate authority in case of accidental contamination of watercourses
Small spills:	Any spillage of product should be cleaned up promptly, and placed in a clean, labeled container for safe disposal.
Large spills:	Any spillage of product should be cleaned up promptly, and placed in clean, labeled containers for safe disposal.

7. HANDLING AND STORAGE

Suitable material	See storage precautions.
Handling	Avoid contact with eyes and skin, do not breathe mists and keep out of reach of children.
Storage precautions	Store in tightly closed container in a dry, cool, well-ventilated area, away from potential sources of heat and fire and incompatible materials.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational exposure limits:	Not determined
Engineering control measures:	Local exhaust ventilation. Provide safety showers and eye washing facility at any location where skin or eye contact can occur.
Personal protection- respiratory:	Use suitable gas mask.
Personal protection- hand:	Wear PVC gloves.
Personal protection- eye:	Use chemical safety goggles or full-face shield.
Personal protection- skin:	Wear boots, acid resistant apron and protective clothing.
Other protection:	As appropriate

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	A dark green liquid
Odor:	None
pH (as is):	5.4
Boiling point:	Not determined
Melting point:	Forms crystals around 0°C
Flash point:	Not determined
Flammability:	Not flammable
Auto-flammability:	Not determined
Explosive properties:	None
Oxidizing properties:	None
Vapor pressure:	Not determined
Density:	1.19 g/ml
Solubility – water:	completely
Solubility – solvent:	Not compatible with solvents other than water.
Solubility – coefficient:	Not known

10. STABILITY AND REACTIVITY

Conditions to avoid:	Incompatible materials.
Incompatible materials:	Strong reducing chemicals, metal hidrides, alkali metals, strong acids and bases, oxidizing agents.
Hazardous decomposition products:	Metallic gasses, NOx, COx, SOx and NH3

11. TOXICOLOGICAL INFORMATION

	Acute (LD50) For product as a whole	Skin and eye contact	Chronic toxicity	Carci=nogenicity	Muta=genicity	Neuro=toxicity	Repro=ductive hazards or terato=genicity	Tumor=ogenic
KelpPmax	> 2000 mg/kg oral, rat	An Irritant	Pathological iron deposition in body tissues. Cardiac toxicity. Central nervous system disorders. Pulmonary disease	Possible	Possible	NIO	Possible	Possible

NIO = No Information Found

12. ECOLOGICAL INFORMATION

Aquatic toxicity – fish:	May be toxic to fish
Aquatic toxicity – daphnia:	NIO
Aquatic toxicity – algae:	May be toxic to algae
Biodegradability:	Some components not readily bio-degradable.
Bio-accumulation:	All components may accumulate in soils and water bodies and possibly in life forms.
Mobility:	Components mobile and may leach into waterways.
German wgk:	Not known

NIO = No Information obtained

13. DISPOSAL CONSIDERATIONS

Disposal methods:	Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options.
Disposal of packaging:	Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

UN no.:	None
Substance identity number:	Unknown
ADR/RID class:	Not listed
ADR/RID item no.:	Not listed
ADR/RID hazard identity no.:	Not listed
IMDG – shipping name:	Not listed
IMDG class:	Not listed
IMDG – packaging group:	Not listed
IMDG – marine pollutant:	Not listed
IMDG - EMS no.:	Not listed
IMDG – MFAG table no.:	Not listed
IATA – shipping name:	Not listed
IATA – class:	Not listed
IATA – subsidiary risk(s):	Not listed
ADNR – class:	Not listed
UK – description:	Not listed
UK – emergency action class:	Not listed
UK – classification:	Not listed
Tremcard no.:	Unknown

15. REGULATORY INFORMATION

EEC hazard classification:	Considered non hazardous for transport
Risk phrase:	None
Safety phrases:	None
National legislation:	Considered non hazardous for transport in South Africa

16. OTHER INFORMATION

Disclaimer: Although reasonable care and diligence have been exercised with the compilation of this data sheet, and the information is given in good faith, it is for the User to satisfy himself of its suitability for a particular purpose. As a consequence neither Omnia nor the compiler accept legal responsibility consequent to the use of this data sheet or its content - provided as a guideline - for any particular purpose