

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Hakaphos Base 7+12+40+2**
 Item Code:
 Product Use: Fertiliser
 Restriction of Use: Refer to Section 15

New Zealand Supplier: HortFertplus
 Address: 7C Vega Place
 Rosedale, Auckland, 0632
 Telephone: +64 9 478 5585
 Fax Number: +64 9 478 5586

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 1 June 2017

Section 2. Hazards Identification

This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

EPA Approval No: Fertilisers (oxidising) – HSR002570

Pictograms



Oxidising



Irritant

Signal Word: Warning

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
5.1.1C	H272	May intensify fire oxidiser.	Category 3
6.1E (oral)	H303	May be harmful if swallowed.	Category 5
6.3B	H316	Causes mild skin irritation.	Category 3
6.4A	H319	Causes serious eye irritation.	Category 2A
9.3C	H433	Harmful to terrestrial vertebrates.	

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P210	Keep away from heat, sparks, open flames or hot surfaces. No smoking.
P220	Keep or store away from clothing or combustible materials.

P221	Take any precaution to avoid mixing with combustibles.
P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective clothing.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use Dry Chemical powder for extinction.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Potassium Nitrate	≥10- <60	7757-79-1
Potassium Sulfate	≥3- <20	7778-80-5
Non-hazardous ingredients	To Bal	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: get medical advice/attention.
If Swallowed	Rinse Mouth with water and drink afterwards plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

Section 5. Fire Fighting Measures

Hazard Type	Oxidising
Hazards from combustion products	Can decompose at above 130 °C. Thermal decomposition products: Nitrogen monoxide, nitrogen dioxide, dinitrogen oxide, ammonia, chloride, hydrogen chloride.
Suitable Extinguishing media	Water, Water Spray, Dry Chemical Not suitable: Foam, Carbon dioxide (CO ₂) and Sand
Precautions for firefighters and special protective clothing	In the event of fire, wear self-contained breathing apparatus. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Clear area of any unprotected personnel. Remove all sources of ignition.

Use mechanical handling equipment for cleanup.

Do not empty into drains. Retain and dispose of contaminated wash water.

Section 7. Handling and Storage**Precautions for Handling:**

- Keep out of reach of children.
- Read label before use.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.
- Keep or store away from clothing or combustible materials.
- Take any precaution to avoid mixing with combustibles.
- Wash hands thoroughly after handling.
- Avoid release to the environment.
- Wear protective clothing.

Precautions for Storage:

- Keep away from combustible material.
- To maintain product quality, do not store in heat or direct sunlight.
- Keep away from sources of ignition - No smoking.
- Protect from contamination.
- Protect from moisture.

Section 8 Exposure Controls / Personal Protection**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). *The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure.* Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). *The 15-minute average exposure standard.* Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply.

Engineering Controls

Ensure adequate ventilation is available

Personal Protection

Eyes	Wear goggles with side shields. Avoid wearing contact lenses.
Hands and Skin	Wear gloves.
Respiratory	Breathing apparatus only if aerosol or dust is formed. Particle filter EN 143 Type P1, low efficiency, (solid particles of inert substances).
General	At the end of the shift the skin should be cleaned and skin care agents applied.

Section 9 Physical and Chemical Properties

Appearance	Various colours - Crystalline
Odour	Odourless

Odour Threshold	Not available
pH	ca. 5, Concentration: 100,00 g/l (20 °C)
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	The product is not flammable.
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Bulk Density	ca. 1.200 kg/m ³
Solubilities	Soluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	> 130 °C To avoid thermal decomposition, do not overheat.
Kinematic Viscosity	Not available
Particle Characteristics	Not applicable

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Temperature 130 degrees Celsius Heat, flames and sparks.
Incompatible Materials	Acids, Bases, Organic Materials and Powdered metals.
Hazardous Decomposition Products	Nitrogen oxides (NOx) and ammonia.

Section 11 Toxicological Information

Acute Effects:

Swallowed	May be harmful if swallowed.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes severe irritation to eyes
Skin	Causes mild skin irritation.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Components:

potassium nitrate :

Acute oral toxicity	: LD50: > 2.000 mg/kg, rat
Acute inhalation toxicity	: LC50: > 0,527 mg/l, rat
Acute dermal toxicity	: LD50: > 5.000 mg/kg, rat

potassium sulfate :

Acute oral toxicity : LD50: > 2.000 mg/kg, rat

Section 12. Ecotoxicological Information

HSNO Classes: 9.3C = Harmful to terrestrial vertebrates.

Toxicity**Product:**

Ecotoxicology Assessment

Toxicity Data on Soil : Not expected to adsorb on soil.

Components:**potassium nitrate :**

Toxicity to fish : LC50: > 100 mg/l, 96 h, Fish

Toxicity to daphnia and other

Aquatic invertebrates : LC50: 490 mg/l, 48h, Daphnia magna (water flea)

Toxicity to algae : LC50: >= 1.700 mg/l, 10 d

potassium sulfate :

Toxicity to fish : LC50: 653 - 796 mg/l, 96 h, Lepomis macrochirus (Bluegill sunfish)

Toxicity to daphnia and other aquatic invertebrates : EC50: 890 mg/l, 48 h, Daphnia magna (Water flea)

Toxicity to algae : EC50: 2.900 mg/l, 48 h, Scenedesmus subspicatus

Persistence and degradability	The methods for determining the biological degradability are not applicable to inorganic substances.
Bioaccumulation	Does not accumulate in organisms.
Mobility in Soil	Slightly mobile in soils

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method: Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned. Ensure waste container holding any unwanted product or contaminated spill media is labelled "Hazardous Waste - Oxidising"

Precautions: depositing the substance in a landfill provided the landfill is managed to ensure that—

- (i) the substance will not at any time come into contact with an explosive or flammable substance (equivalent to HSNO class 1, 2, 3 or 4); and
- (ii) there is no ignition source in the vicinity of the disposal site that is capable of igniting the substance; and
- (iii) if the substance were to combust, or cause or contribute to combustion, no person or place where a person may legally be, would be exposed to more blast overpressure or heat radiation than that described in regulation 7(3)(b) of the Hazardous Substances (Disposal) Regulations 2001; and
- (iv) the concentration of the substance in any discharge from the landfill does not, after reasonable mixing, exceed any relevant tolerable exposure limit and/or environmental exposure limit set for the substance or any of its component(s).

Disposal methods to avoid: Do not allow to enter waterways

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

Road and Rail Transport

UN No: 1479
Class-primary 5.1
Packing Group III
Proper Shipping Name: OXIDISING SOLID, N.O.S

Air Transport

UN No: 1479
Class-primary 5.1
Packing Group III
Proper Shipping Name: OXIDISING SOLID, N.O.S

Marine Transport

UN No: 1479
Class-primary 5.1
Packing Group III
Proper Shipping Name: OXIDISING SOLID, N.O.S

Limited Quantity Exemption - If transporting in quantities ≤ 5 kg will be exempt

Section 15 Regulatory Information

EPA Approval Code: Fertilisers (Oxidising) – HSR002570

HSNO Classification: 5.1.1C, 6.1E (oral), 6.3B, 6.4A, 9.3C

HSNO Controls:

Trigger quantities:

	Trigger Quantity
Approved Handler	1000kg
Location Certificate	100kg if manufactured or used 1000kg where package to be kept closed at all times
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000kg
Emergency Response Plan	5000kg
Secondary Containment	5000kg
Restriction of Use	None

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible

UEL
WES

authority.
Upper Explosive Level
Workplace Exposure Limit

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

Disclaimer

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