SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**WAKE-up® Liquid**
Product No:	
Product Use:	Professional formulation of fertiliser products.
Restrictions of Use:	Refer to Section 15
New Zealand Supplier:	Horticentre Ltd
Address:	10 Firth Street Drury, 2113
Telephone:	+64 9 294 8453
Fax Number:	+64 9 294 7272
New Zealand:	**0800 764 766 (National Poison Centre)**
Date of SDS Preparation:	22 November 2023

Section 2. Hazards Identification

Not classified as hazardous according to Regulation (EC) No. 1272/2008 [CLP] which meets New Zealand jurisdiction criteria as per EPA Hazardous Substances (Safety Data Sheets) Notice 2017.

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Non-hazardous ingredients	To 100	

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse with water. Remove contact lenses, if present and easy to do. Continue rinsing. Take victim to an ophthalmologist if irritation persists.
If on Skin	Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.
If Swallowed	Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Consult a doctor/medical service if you feel unwell.
If Inhaled	Remove person to fresh air. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms after inhalation : Exposure to high concentrations: Coughing.
Symptoms after skin contact : Slight irritation.
Symptoms after eye contact : Slight irritation.

Symptoms after ingestion	: After absorption of high quantities: Gastrointestinal complaints. Change in urine output.
Chronic symptoms	: On continuous/repeated exposure/contact: red skin, dry skin, skin rash/inflammation, runny nose.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	At high temperature may liberate dangerous gases.
Suitable Extinguishing media	Water spray, polyvalent foam, alcohol-resistant foam, polymer foam, ABC powder, carbon dioxide. Container may slop over if solid jet (water/foam) is applied.
Precautions for firefighters and special protective clothing	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Exposure to fire/heat: keep upwind, consider evacuation and have neighbourhood close doors and windows. Cool tanks/drums with water spray/remove them into safety. Dilute toxic gases with water spray. Do not breathe fumes.
HAZCHEM CODE	**None allocated.**

Section 6. Accidental Release Measures

Wear appropriate PPE as detailed in Section 8. Wear suitable respiratory equipment in case of insufficient ventilation. Keep unprotected persons away. Ensure adequate air ventilation.

Prevent uncontrolled discharges into the environment (rivers, water courses, sewers etc.).

Collect as much as possible in a suitable clean container, preferably for re-use, otherwise for disposal. Clean contaminated surfaces with an excess of water. Dispose of according to Section 13.

Section 7. Handling and Storage

Handling

- Use sufficient ventilation.
- Do not get in eyes, on skin, or on clothing.
- Do not eat, drink or smoke during use.
- Always wash hands after handling the product.
- Wash contaminated clothing before reuse.

Storage

- Storage temp: Minimum: -10^{0}C - 40^{0}C
- Keep preferably in the original container.
- Keep substance away from: heat sources. ignition sources.
- Keep substances away from: oxidizing agents, (strong) acids, (strong) bases.
- Store in dry, cool, well-ventilated area. Provide the tank with earthing.
- Do not store in unlabelled containers. Keep packaging closed when not in use.
- Packaging materials: Suitable material: synthetic material, stainless steel.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		**STEL**	
Substance	**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. Workplace Exposure Standards and Biological Exposure Indices APRIL 2022 13TH EDITION.

Engineering Controls

Ensure good ventilation of the work station. Care for eyewash stations at the workplace.

Personal Protective Equipment

Eyes	Safety glasses
Hands	Gloves made of rubber or PVC
Respiratory	In case of insufficient ventilation, wear suitable respiratory equipment.

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Colourless
Odour	Vinegar odour
Odour Threshold	Not available
pH	7 – 8
Crystallization Temp	-20^0C
Boiling Point	>= 100^0C
Melting/Freezing Point	Not available
Flash Point	Not flammable
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	2300 Pa (as water)
Density	1.34 kg/l
Solubilities	Soluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	>= 60^0C
Kinematic Viscosity	Not available
Dynamic Viscosity	Not available
Particle Characteristics	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Avoid high temperatures.
Hazardous Reactions	Reacts violently with (some) acids: release of corrosive gases/vapours (acetic acid vapours).
Incompatible Materials	No information available.
Hazardous Decomposition Products	Decomposes on exposure to temperature rise: release of toxic/corrosive/combustible gases/vapours (acetic acid vapours). On burning: release of harmful/irritant gases/vapours e.g.: carbon monoxide - carbon dioxide.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Not applicable.
Skin	Not applicable.

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.

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Persistence and degradability	Preparation based on substances which are readily biodegradable.
Bioaccumulation	Does not contain bioaccumulative component(s).
Mobility in Soil	Soluble in water.
Other adverse effects	No data available.

Section 13. Disposal Considerations

Disposal Method:
Triple rinse container. Cleaned packaging maybe offered for recycling or landfill in accordance with local regulations. Dispose of unwanted product as a hazardous material according to Local Regulations.

Precautions and methods to avoid: None known.

Section 14 Transport Information

This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021

Section 15 Regulatory Information

Not classified as hazardous according to Regulation (EC) No. 1272/2008 [CLP] which meets New Zealand jurisdiction criteria as per EPA Hazardous Substances (Safety Data Sheets) Notice 2017.

Section 16 Other Information

Glossary

Cat	Category
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 authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2022 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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