

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Intra Hydro Pure**
 Product Use: Cleaning and disinfection agent
 Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd
 Address: 10 Firth Street
 Drury, 2113

Telephone: +64 9 294 8453
 Fax Number: +64 9 294 7272

Emergency Telephone: 0800 764 766 (National Poison Centre)

Date of SDS Preparation: 22 March 2022

Section 2. Hazards Identification

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020.

EPA Approval No: HSR001326

Pictograms



Signal Word: **DANGER**

GHS Classification and Category	Hazard Code	Hazard Statement
Oxidising liquids Cat. 2	H272	May intensify fire oxidiser.
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Skin corrosion Cat. 1B	H314	Causes severe skin burns.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to terrestrial vertebrates	H433	Hazardous 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 and combustible materials.
P221	Take any precaution to avoid mixing with combustibles.

P260	Do not breathe dust, fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370 + P378	In case of fire: Use water, water mist 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.
Hydrogen peroxide	<50	7722-84-1

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
If on Skin	Take off contaminated clothing and wash before re-use. Wash skin with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
If Swallowed	Rinse mouth. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Keep warm. Call a physician immediately.
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.

Most important symptoms and effects, both acute and delayed

Symptoms: Harmful if swallowed.
Causes severe skin burns.

Causes serious eye damage.
May cause damage to organs through prolonged or repeated exposure.
Refer to Section 11 for full details.

Treatment: Treat symptomatically

Section 5. Fire Fighting Measures

Hazard Type	Oxidiser
Hazards from products	In case of fire, hydrogen can generate oxygen what can contribute to the intensity of the fire. The product itself does not burn but it sustains the combustion of combustible material. Risk of explosion if mixed with combustible material. Pressure build-up in confined space (risk of decomposition).
Suitable Extinguishing media	Use: water, water mist. The product itself does not burn. Do not use: drying powder, carbon dioxide (CO2).
Precautions for firefighters and special protective clothing	Self-contained breathing apparatus (EN 133). Complete suit protecting against chemicals. Cool containers / tanks with water spray.
HAZCHEM CODE	2P

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin, eyes and clothing. Never return spills in original containers for re-use. Ensure adequate ventilation. Wear personal protective equipment. Remove all sources of ignition. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent product from entering drains. Should not be released into the environment.

Methods and materials for containment and cleaning up

Prevent from spreading. Dam up. Very dilute solution can be washed into drains with plenty of water. Contact the proper local authorities. Never return spills in original containers for re-use. Dispose as per Section 13.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Keep away from heat, sparks, open flames or hot surfaces. No smoking.
- Keep or store away from clothing and combustible materials.
- Take any precaution to avoid mixing with combustibles.
- Do not breathe dust, fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Never return unused material to storage receptacle. Open drum carefully as content may be under pressure.
- Keep away from combustible material. Protect from contamination.
- When using the product in a (drinking) water pipeline, ensure proper ventilation to avoid buildup of pressure.

Precautions for Storage:

- Keep out of reach of children.
- Store locked up.
- Keep container tightly closed.
- Keep in a cool, well-ventilated place.

- Keep away from heat and sources of ignition.
- Condition of containers should be checked regularly.
- Store in original container.
- Store in a receptacle equipped with a vent.
- Materials to avoid: combustible material, reducing agents, organic materials, bases, metal oxides, metal ions (e.g. Mn, Fe, Cu, Ni, Cr, Zn), metal salts, rust, dirt.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Hydrogen peroxide [7722-84-1]	1	1.4	-	-

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 NOV 2020 12TH EDITION.

Control parameters

DNEL hydrogen peroxide: MAC-value 1 ppm 1,4 mg/m³ (human, inhalation, lon-term)

PNEC hydrogen peroxide: 0.0126 mg/l (fresh water) PNEC hydrogen peroxide:
0.0126 mg/l (marine water) PNEC hydrogen peroxide:
0.0023 mg/kg (soil)

PNEC hydrogen peroxide: 4.66 mg/l (STP)

Engineering Controls

Avoid exposure. Ensure proper ventilation. Read the SDS/label of the product before use. Keep running water within arm reach.

Personal Protection Equipment



Eyes	Wear suitable, well-fitting safety goggles and face field (EN 166).
Hands	Use gloves, e.g.: Butyl rubber, penetration time > 480 min, width 0.7 mm; Natural rubber, penetration time > 480 min, width 1 mm; Nitrile rubber, penetration time > 480 min, width 0.33 mm;
Respiratory	Ensure proper ventilation. In case of spraying / fogging, use respiratory protection (e.g. filter ABEK-P3).

Section 9 Physical and Chemical Properties

Appearance	Liquid
Colour	Colourless
Odour	Pungent
Odour Threshold	Not available
pH	<1.5
Boiling Point	114 ⁰ C
Melting Point	Not available
Freezing Point	-52 ⁰ C
Flash Point	Not available
Flammability	Non Flammable

Product Name: Intra Hydro Pure
Date of SDS: 22 March 2022

SDS Prepared by: Technical Compliance Consultants (NZ) Ltd
Tel: 64 9 475 5240 www.techcomp.co.nz

Upper and Lower Explosive Limits	Not available
Vapour Pressure	299 Pa (by 20 °C)
Relative Density	Not available
Density	1195 kg/m ³ (by 20 °C)
Solubilities	Completely soluble
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity, dynamic	< 20 mPa·s
Part. coeff. n/octanol/water	Log P _{ow} : -1.57
Oxidising	May intensify fire; oxidizer (50-70%)
Evaporation Rate	> 1 (n-butyl acetate = 1)

Section 10. Stability and Reactivity

Stability of Substance	The product is stabilized. It decomposes upon heating.
Possible hazardous reactions	Danger of decomposition when in contact with avoidable substances. Danger of explosion in closed systems as result of pressure buildup. Danger of decomposition upon heating.
Conditions to Avoid	High temperatures. UV light. Protect from contamination.
Incompatible Materials	Materials to avoid: combustible material, reducing agents, organic materials, bases, metal oxides, metal ions (e.g. Mn, Fe, Cu, Ni, Cr, Zn), metal salts, rust, dirt.
Hazardous Decomposition Products	Decomposes into oxygen and water. Vapor may originate during decomposition.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. Corrosive. Bleeding of mucous membranes up to severe damage to organs.
Dermal	Not applicable.
Inhalation	Not triggered however if inhaled could be Pungent or cause irritation. Irritation of mucous membranes, lung oedema.
Eye	Causes damage to eyes and cornea.
Skin	Causes severe skin damage. Red-ness. White-ness (oxygen emphysema).

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	May cause damage to organs (oral) through prolonged or repeated exposure.

Of hydrogen peroxide the following toxicity is available:

LD50 (rat, oral)	:	>500 mg/kg (50% concentration)
LC50 (rat, inhalation, 4h)	:	2000 mg/m ³
LD50 (rat, dermal)	:	>4000 mg/kg (50% concentration)

Section 12. Ecotoxicological Information

Hazardous to terrestrial vertebrates.

Persistence and degradability	Hydrogen peroxide is readily biodegradable. Decomposes into oxygen and water.
Bioaccumulation	Bioaccumulation is unlikely, given the low partition coefficient n-octanol/water (see SECTION 9).
Mobility in Soil	See vapor pressure and solubility in water in SECTION 9. However, hydrogen peroxide will react directly when in contact with organic materials.
Other adverse effects	No data available

Aquatic toxicity

LC50/96 h/Pimephales promelas: 22 – 33 mg/l

LC50/48 h/ Leuciscus idus: 35 mg/l

EC50/ Daphnia: 2.4 – 7.7 mg/l

Toxicity to other organisms

EC50/30 min/activated sludge/Respiratory inhibition of activated sludge/OECD test guideline 209: 466 mg/l.

EC50/3 h/activated sludge/Respiratory inhibition of activated sludge/OECD test guideline 209: > 1 000 mg/l.

Section 13. Disposal Considerations

Disposal methods:

The product can be used completely. Rinse empty packaging with water prior to disposal. The rest of the product can be flushed away with much water. The product will be delivered in a polyethylene can. After use the rinsed packaging can be treated as normal waste.

Precautions: None known.

Section 14 Transport Information

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



Road, Rail, Sea and Air Transport

UN No	2014
Class – Primary	5.1
Subsidiary Risk	8
Packing Group	II
Proper Shipping Name	Hydrogen peroxide, aqueous solution, 5.1 (8), II
Marine Pollutant	No
Special Provisions	If the product's individual container is below 1L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15 Regulatory Information

EPA Approval Code: **HSR001326**

HSWA & EPA Controls	Trigger Quantity
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Certified Handler	Not required
Location Certificate	>50L (opened), 500L (closed)
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L
Emergency Response Plan	500L
Secondary Containment	500L
Fire Extinguisher	500L - 2x
Restriction of Use	None

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 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
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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