Safety Data Sheet
Environmental Protection Authority

Hazadous Substances (identification)
Regulations 2004 (NZ)

Product Name **Phenophthalein 1%**	Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section 1

Manufacturer's Name: Pacific Rim Oenology Services	**Emergency Telephone Number:** **National Poisons 24hr:** 0800 764 766
Address (Number, Street, City, Region, and Post Code): 4 Bristol St, Riverlands, Blenheim, Marlborough, 7274	**Telephone Number for Information:** (+64) (0) 3 577-9000
PO Box 1132, Blenheim 7240	**Original - Issue date:** 19/07/17 - 14/11/17
New Zealand	

Section 2 - Hazard(s) identification

Hazardous Components (Specific Chemical Identity; Common Name(s))	HSNO for components	Classification
Ethyl Alcohol #64-17-5	HSR001144	3.1B, 6.4A
Phenolphthalein #77-09-8	HSR005374	6.7B

Section 3 - Label Elements

Signal Word Danger

Hazard statements
H225 - Highly flammable liquid and vapour
H302 - Harmful if swallowed
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer (oral)

Precautionary statements
P210 - Keep away from heat, sparks, open flames, hot surfaces. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, ventilating, lighting equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P260 - Do not breathe mist, vapours, spray

P264 - Wash exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves, protective clothing, eye protection, face protection
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing
P301+P312 - IF SWALLOWED: 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
P308+P313 - IF exposed or concerned: Get medical advice/attention
P312 - Call a POISON CENTER/doctor/physician if you feel unwell
P330 - If swallowed, rinse mouth
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 carbon dioxide (CO2), powder, alcohol-resistant foam for extinction
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P235 - Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to comply with local, state and federal regulations

Section 4 - Composition and information on ingredients

Component	CAS-No	Weight %
Ethyl alcohol	64-17-5	65
Phenolphthalein	77-09-8	1

Section 5 - First Aid Measures

Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.
Most important symptoms/effects	Breathing difficulties. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Inhalation	Move to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
First Aid Facilities	Eyewash, safety shower and washroom.
Notes to Physician	Treat symptomatically. Symptoms may be delayed.

Section 6 - Fire Fighting Measures

Suitable Extinguishing Media
Cool closed containers exposed to fire with water spray.

Unsuitable extinguishing Media
No information available.

Hazardous Combustion Products
Specific Hazards Arising from the Chemical
Flammable. Containers may explode when heated.
Vapors may form explosive mixtures with air.
Vapors may travel to source of ignition and flash back.

Special protective equipment and precautions for fire fighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 7 - Accidental Release Measures

Emergency procedures
Remove all sources of ignition.
Take precautionary measures against static discharges.

Environmental Precautions
See Section 13 for additional ecological information.
Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up
Remove all sources of ignition.
Use spark-proof tools and explosion-proof equipment.

Reference to Other Sections
Refer to protective measures listed in Sections 9 and 14.

Section 8 - Handling and Storage

Precautions for Safe Handling
Keep away from open flames, hot surfaces and sources of ignition.
Use only non-sparking tools.
To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded.
Take precautionary measures against static discharges.

Conditions for Safe Storage, Including any Incompatibilities
Keep container tightly closed in a dry and well-ventilated place.
Keep away from heat and sources of ignition.
AS/NZS 2243.10:2004, Safety in Laboratories - Storage of chemicals
AS 1940-2004 - The storage and handling of flammable and combustible liquids

Section 9 - Exposure Controls and Personal Protection

Exposure limits
Workplace Exposure Standards and Biological Exposure Indices (8th edition). New Zealand Department of Labour

Component	New Zealand WEL
Ethyl Alcohol	TWA: 1000 ppm TWA: 1880 mg/m^3

Biological limit values
Substances assigned Biological Exposure Indices in the New Zealand Workplace Exposure Standards and Biological Exposure Indices (8th edition). New Zealand Department of Labour.
This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Engineering Measures
Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection	Safety glasses with side-shields (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications).
Hand Protection	Protective gloves, disposable gloves AS/NZS 2161.1.
Skin and body protection	Long sleeved clothing.
Repiratory Protection	Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of repiratory protective devices.

Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.
Environmental exposure controls	Prevent product from entering drains. Do not allow material to contaminate ground water system.

Section 10 - Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance	Clear Colourless
Physical State	Liquid
Odour	No information available
Odour Threshold	No data available
pH	Not applicable
Melting Point/Range	No data available
Softening Point	No data available
Boiling Point/Range	Not applicable
Flash Point	13 °C / 55.4 °F
Evaporation Rate	No data available
Flammability (solid, gas)	Not applicable - Liquid
Explosion Limits	No data available
Vapour Pressure	No data available
Vapour Density	No data available
Specific Gravity / Density	No data available
Bulk Density	Not applicable
Water Solubility	Freely soluble
Solubility in other solvents	No information available
Partition Coefficient (n-octanol/water)	
Component	**log Pow**
Ethyl alcohol	-0.32
Phenolphthalein	2.41
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available Vapours may form explosive mixtures with air
Oxidising Properties	No information available
Other information	
Molecular Formula	$C_{20}H_{14}O_4$
Molecular Weight	318.32

Section 11 - Stability and Reactivity

Reactivity	None known, based on information available.
Stability	Stable under normal conditions.
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition.
Hazardous Decomposition Products	None under normal use conditions.

Hazardous Polymerisation	No information available.

Section 12 - Toxicological Information

Information on Toxicological Effects
Product Information

a) acute toxicity;	
Oral	Based on available data, the classification criteria are not met
Dermal	Based on available data, the classification criteria are not met
Inhalation	Based on available data, the classification criteria are not met
(b) skin corrosion/irritation;	No data available
(c) serious eye damage/irritation;	Category 2A
(d) respiratory or skin sensitization;	No data available
Respiratory	No data available
Skin	No data available
(e) germ cell mutagenicity;	No data available
(f) carcinogenicity;	Category 2
(g) reproductive toxicity;	No data available
(h) STOT-single exposure;	No data available
(i) STOT-repeated exposure;	No data available
Target Organs	None known.
(j) aspiration hazard;	No data available
Symptoms / effects, both acute and delayed	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Section 13 - Ecological Information

Ecotoxicity effects	Contains a substance which is: Toxic to aquatic organisms See below
Persistence and Degradability	No information available
Persistence	Persistence is unlikely, based on information available
Degradation in sewage	Contains substances known to be hazardous to the environment or not degradable in waste
Treatment plant	Water treatment plants
Bioaccumulative Potential	Bioaccumulation is unlikely
Mobility	The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces. Will likely be mobile in the environment due to its volatility. Disperses rapidly in air.
Endocrine Disruptor Information	This product does contain known or suspected endocrine disruptors - Phenolphthalein - Group III chemical
Persistent Organic Pollutant	This product does not contain any known or suspected substance
Ozone Depletion Potential	This product does not contain any known or suspected substance

The product contains following substances which are hazardous for the environment:

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Ethyl Alcohol	Fathead minnow LC50 = 14200 mg/L/96 Hr	EC50 = 9268 mg/L/48 Hr EC50 = 10800 mg/L/24 Hr	EC50 (72 Hr) = 275 mg/L (Chorella vulgaris)	Photobacyerium phosphoreum: EC50 = 34634 mg/L/30 min Photobacerium phosphoreum: EC50 = 35470 mg/L/5 min

Section 14 - Disposal Considerations

Waste from Residues / Unused Products

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected.
Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations.
Assure conformity with all applicable regulations

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.
Empty containers retain product residue, (liquid and/or vapor), and can be dangerous.
Keep product and empty container away from heat and sources of ignition.

Other Information

Disposal agencies or waste contractors must comply with the New Zealand Hazardous Substances (Disposal) Regulations.
Do not dispose of waste into sewer.
Waste codes should be assigned by the user based on the application for which the product was used.
Can be incinerated, when in compliance with local regulations.

Section 15 - Transport Information

IMDG/IMO

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II

NZS 5433:2012

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II

Component	Hazchem Code
Ethyl alcohol 64-17-5	2YE

IATA

UN-No UN1170

Hazard Class	3
Packing Group	II

Environmental hazards	No hazards identified
Special Precautions	May cause cancer, wear appropriate clothing
Additional information	None known

Section 16 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Component	HSNO Approval Number
Phenolphthalein Solution	HSR002652

Section 17 - Other Information

Legend
LD50 - Lethal Dose 50%
EC50 - Effective Concentration 50%
WEL - Workplace Exposure Limit
TWA - Time Weighted Average
POW - Partition coefficient Octanol:Water

Key literature references and sources for data
Suppliers safety data sheet, EPA, NZTA
For a correlation of GHS and HSNO classes and categories refer to:
http://www.epa.govt.nz/publications/hsnogen-ghs-nz-hazard.pdf

Training Advice
Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.
Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.
First aid for chemical exposure, including the use of eye wash and safety showers.
Chemical incident response training.
Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

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Owner:	Laboratory Manager

End of Safety Data Sheet