MATERIAL SAFETY DATA SHEET

PRODUCT AND COMPANY IDENTIFICATION

Product Name: **Goulter's Vinegar WeedX Concentrate**

Product Description: Broad spectrum herbicide prepared from naturally occurring active ingredients.

Manufacturer: Goulter's Vinegar Products Ltd
122 Tahunanui Drive
Nelson

Country of Origin: New Zealand

Telephone Number: (03) 546 5174

Mobile Number: 027 8463 111

Emergency Phone No: **0800 764 766**

COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Quantity	CAS Number
Acetic acid	8-30%	64-19-7
Citric acid	5-30%	77-92-9
Nonionic surfactant	0.1-0.5%	
Water	To 100%	

HAZARDS IDENTIFICATION

HAZARD CLASS: 8

Emergency Overview: Corrosive liquid. May be harmful if swallowed. May cause burns to all areas of contact. May be harmful if inhaled. Inhalation may cause lung and tooth damage. Repeated exposures may cause inflammation of the nose, throat and bronchial tubes.

Target Organs: Eyes, skin, respiratory system.

Eye Contact: Eye contact may cause severe eye damage. Vapour exposure may cause watering and irritation of eyes.
Inhalation: Inhalation of concentrated vapours may cause damage to the lining of the nose, throat and lungs.
Skin Contact: May cause damage to the skin. Effects may include redness, pain, skin burns.
Ingestion: Swallowing may cause severe injury.

6-1E	Substances that are acutely toxic may be harmful - aspiration hazard.
6-9B	Substances that are harmful to human target organs or systems.
8-1A	Substances that are corrosive to metals.
8-2C	Substances that are corrosive to dermal tissue (skin).
8-3A	Substances that are corrosive to ocular tissue (eyes).
9-1D	Substances that are slightly harmful to the aquatic environment.
9-3C	Vertebrate Ecotoxcity

FIRST AID MEASURES

For advice contact a Poisons Information Centre (in New Zealand phone **0 800 764 766**) or a doctor.

Inhalation: Remove affected person from area of exposure to fresh air. Remove contaminated clothing, loosen remaining clothing and keep patient warm in a comfortable position until recovered. If patient has difficulty breathing and develops a grey/blue skin colour ensure airway is clear and have a qualified person administer oxygen. Apply artificial respiration if the patient is not breathing and seek immediate medical assistance.

Skin Contact: Remove contaminated clothing and wash skin with soap and running water. If irritation occurs seek medical advice.

Eye Contact: Flush eyes thoroughly with clean water for at least 15 minutes. Seek medical advice immediately after flushing.

Ingestion: Do not induce vomiting. Slowly dilute with 1 - 2 glasses of milk or water. Seek medical advice. Do not give anything by mouth to an unconscious person.

Notes to Physician: Treat symptomatically.

FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards: Use water spray to cool fire exposed surfaces. Decomposition in fire may produce toxic gases. Do not allow runoff to enter waterways.

Special Protective Equipment for Firefighters: Full protective clothing and approved self contained breathing apparatus required for all fire fighting personnel.

ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective equipment. Avoid breathing fumes. Stay up wind or provide ventilation.

Environmental Precautions: Prevent spill from entering sewers, stormwater systems, waterways or low areas.

Spill Clean up: Isolate spill and stop leak where safe. Contain spill with sand, soil or other inert absorptive material. Neutralise to ph 6-8. Scoop up the material and place in a labelled container or spill disposal drum and seal well pending appropriate disposal. Avoid generating dust during the clean up.

HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes or clothing. Avoid breathing vapours. Launder contaminated clothing before re-use.

Storage: Store in the original container, well sealed in a dry cool place away from children, food, feedstuffs and direct sunlight.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use in well ventilated areas only.

Respiratory Protection: Wear an organic vapour/acid respirator.

Hand Protection: Wear impervious rubber or vinyl gloves.

Skin Protection: Wear overalls, impervious rubber boots.

Eye Protection: Wear chemical goggles and a face shield of a splashing hazard exists.

Exposure Limits: TWA (Workplace Exposure Standard - Time Weighted Average) is the eight hour time weighted average exposure standard designed to protect persons from the effects of long term exposure. The TWA for acetic acid 10 ppm, 25 mg/m^3.

Workplace Practices: Keep product away from food and drink. Always was hands and face thoroughly with soap and water before eating, drinking, smoking or using the toilet. Wash contaminated clothing daily after use.

PHYSICAL AND CHEMICAL PROPERTIES

Characteristic	Value
Physical state	Liquid
Colour	Amber
Odour	Acrid
Solubility in Water	Miscible in all proportions
Specific Gravity	1.089
Vapour Pressure (acetic acid)	11mm Hg @ 20 deg. C
Flash Point (acetic acid)	40 deg. C (closed cup)
Boiling Point	100 - 118 deg. C
Odour threshold	0.2 - 24ppm
pH	1.4 - 1.6

STABILITY AND REACTIVITY

Stability: **Product r**emains stable for at least two years when stored at ambient temperature.

Incompatible Materials: Strong alkalis.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide

TOXICOLOGICAL INFORMATION

Principal Route of Exposure: Eye or skin contact, inhalation.

Inhalation: Causes respiratory irritation

Eye Contact: May irritate and burn the eyes.
Skin Contact: May cause skin burns.
Ingestion: May cause burns of mouth, throat and stomach.
Aggravated Medical Conditions: Skin disorders.

Genotoxicity / Mutagenicity: Not mutagenic.

Carcinogenicity: Not considered as carcinogenic to humans.

Toxicity for reproduction: No developmental toxicity or reproductive toxicity has been shown.

Toxicological Data
Acetic acid vapour is a severe irritant of the eyes, mucous membrane and skin. In mice and guinea pigs the lethal concentration for 1 hour exposure was 5,000 ppm. Exposure to 50 ppm is intolerable to most persons and results in intense lacrimation and irritation of the eyes nose and throat with pharyngeal edema and chronic bronchitis

Oral LD50 (rat): 3,310 mg/kg
Oral LD50 (mouse) 4,960 mg/kg

ECOTOXICOLOGICAL INFORMATION

Persistence in Environment: This product is readily biodegradable due to the action of naturally occurring microorganisms present in soil, waterways and sewage systems.

Bioaccumulation potential: Not bio-accumulative.

Aquatic Toxicity: Low toxicity to aquatic organisms

DISPOSAL CONSIDERATIONS

Waste Disposal: Neutralise with fine lime prior to disposal in an approved landfill site. For small amounts absorb with sand or soil and dispose of in an approved landfill site. Triple rinse empty container and dispose of in an approved recycling process. Ensure that the method of disposal complies with Local City, District or Regional Council Waste Management Authority regulations.

TRANSPORT INFORMATION

Shipping Name: Acetic acid solution, more than 10% less than 50% acid by mass

UN Number: 2790

Packing Group: lll

DG Class: Dangerous Goods

Hazchem Code: 8 - Corrosive

REGULATORY INFORMATION

HSNO Approval: HSR101099

Classification: C - Corrosive

Risk Phrases: R34 - Causes burns

Safety Phrases: S2 Keep out of reach of children.
S23 Do not breath gas, fumes or vapour spray.
S26 In case of contact with eye, rinse immediately with plenty of water and seek medical advice.
S45 In case of accident or you feel unwell seek medical advice immediately.

OTHER INFORMATION

New Zealand Poisons Information Centre Phone: **0800 POISON (0800 764 766)**

New Zealand Emergency Services Phone: **111**

The information contained in this Safety Data Sheet is, to the best of our knowledge, correct at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation of the product and is not intended as a warranty or specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein. Final determination of the suitability of any material is the sole responsibility of the user.

Date: 4 September 2019