MATERIAL SAFETY DATA SHEET
Calf Oral Electrolyte Replacer

Issue date: February 2021 Review date: February 2026

SECTION 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product name: Calf Oral Electrolyte Replacer

Recommended Use: Animal Feed Supplement - Vitamin

Product Code: A9905

Company identification Address:
Nutritech International
6 Aintree Avenue, Airport Oaks, Mangere, Auckland

Distributor address:
AHD Ltd 1229 Maraekakaho Road
Hastings 4175
New Zealand
Phone (06) 873 3611

Poisons Information Centre: 0800-764-766

Transport Emergency 111 Fire and police

SECTION 2: HAZARD IDENTIFICATION

Approval in New Zealand
This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002521, Animal Nutritional and Animal Care Products Group Standard 2017): The substance has been classified as hazardous according to the criteria in the Hazardous substances (Minimum Degrees of Hazard) Notice 2017.

2.1 **Hazard class:** 6.3B, 6.4A
Hazard Statements: H316 – Causes mild skin irritation.
H319 – Causes serious eye irritation.

2.2 **Symbols – WARNING**

GHS 7 Classification – effective from 30 April 2021
This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO, Approval HSR002521, Animal Nutritional and Animal Care Products Group Standard 2020):

Classes: Eye irrit cat 2 **Hazard Statements:** H319 – Causes serious eye irritation.

PRECAUTIONARY STATEMENTS

P103 – Read label before use
P264 – Wash hands thoroughly after handling.
P280 – Wear eye protection.
P332+P313 – If skin irritation occurs: Get medical advice/attention.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 – If eye irritation persists: Get medical advice/attention.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulation.

SECTION 3: COMPOSITION INFORMATION

Component	CAS/Identification	Conc (%)
Potassium Sulphate	7778-80-5	
Sodium Chloride	7647-14-5	10-30%
Ingredients not contribution to HSNO Classes		

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

SECTON 4: EMERGENCY FIRST AID PROCEDURES

If medical advice is needed, have product container or label at hand. You should call the National Poisons Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 0800 764 766 (0800 POISON) (24 hr emergency service).

Recommended first aid facilities Ready access to running water is required. Accessible eyewash is required.

EXPOSURE

Swallowed If swallowed: Call a POISON CENTRE or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting. Give a glass of water to drink. Contact a doctor if experiencing any symptoms.

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin contact IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminate clothing and wash before re-use.

Inhalation: Generally, inhalation of fumes/vapours/dusts is unlikely to result in adverse health effects. If coughing, dizziness or shortness of breath is experienced, remove the patient to fresh air immediately. If patient is unconscious, place in the recovery position (on the side) for transport and contact a doctor.

Advice to Doctor: Treat symptomatically

SECTION 5: FIRE FIGHTING MEASURES

Fire and explosion hazards: There are no specific risks for fire/explosion for this chemical. It is non-flammable.

Suitable extinguishing substances: Carbon dioxide, extinguishing powder or water jet. Fight larger fires with water jet or alcohol resistant foam.

Unsuitable extinguishing substances: Unknown.

Products of combustion: Carbon dioxide, and if combustion in incomplete, carbon monoxide and smoke. Water. May form toxic mixtures in air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures.

Protective equipment: No special measures are required.

Hazchem code: NA

SECTION 6: ACCIDENTAL RELEASE MEASURES

Containment Emergency procedures: In all cases design storage to prevent discharge to storm water. If a significant spill occurs: Stop leak if safe/necessary; Isolate area. Collect spill – see below; Transfer to container for disposal. Dispose of according to guidelines below (Section 13).

Clean-up method: Use absorbent (soil, sand or other inert material). Rags are not recommended for the clean-up of spills, as they may create fire or environmental hazard. Collect and seal in properly labelled containers or drums for disposal. If contamination of crops, sewers or waterways has occurred advise local emergency services.

Precautions: No special protective clothing is normally necessary.

SECTION 7: STORAGE & HANDLNG

Storage: Avoid storage of harmful substances with food. Avoid contact with incompatible substances as listed in Section 10.

Handling: Keep exposure to a minimum, and minimize the quantities kept in work areas. See section 8 with regard to personal protective equipment requirements.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTIVE EQUIPMENT

Workplace Exposure Standards

A workplace exposure standard (WES) has not been established by WorkSafe NZ for this product. There is a general limit of 3mg/m3 for respirable particulates and 10mg/m3 for inhalable particulates when limits have not otherwise been established.

NZ Workplace Exposure Stds	Ingredient	WES-TWA*	WES-STEL
	No ingredient listed		

Engineering Controls

In industrial situations, it is expected that employee exposure to hazardous substances will be controlled to a level as far below the WES as practicable by applying the hierarchy of control required by the Health and Safety at Work Act (2015) and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016. Exposure can be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify processes or increase ventilation.

Personal Protective Equipment

Eyes Avoid contact with eyes. Use safety glasses and or chemical splash goggles if splashes are possible. Select eye protection in accordance with AS/NZS 1337

Skin If discomfort is felt (eg; if pre-existing conditions exist, such as dermatitis, cuts or sensitive skin), gloves may be helpful. If you suffer from dermatitis type skin conditions, use gloves. Protective gloves or suitably resistant material must comply with AS 2161. Replace frequently. Gloves should be checked for tears or holes before use.

Respiratory A respirator when airborne concentrations approach the WES (section 8). Respirators must have filters appropriate to the duty and comply with AS/NZS1716 and selected, used and maintained in accordance with AS/NS1715. Use a 'ENTER RESPIRATOR TYPE'. If using a respirator, ensure that the cartridges are correct for the potential air contamination and are in good working order. Fit testing and clear guidelines and training for use and maintenance of PPE are necessary.

WES Additional Information Not applicable

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance	powder
Odour	not specified
pH	not specified
Vapour pressure	no data
Viscosity	no data
Boiling point	no data
Volatile materials	no data
Freezing/melting point	no data
Solubility	soluble in water
Specific gravity / density	~ 1.2
Flash point	no data
Danger of explosion	no data
Auto-ignition temperature	non flammable
Upper & lower flammable limits	non flammable
Corrosiveness	non corrosive

SECTION 10. STABILITY & REACTIVITY

Stability:	Stable
Conditions to be avoided:	Containers should be kept closed in order to avoid contamination. Keep from extreme heat and open flames.
Incompatible groups	Strong acids and bases. Oxidising agents
Substance Specific Incompatibility	none known
Hazardous Decomposition Products	None
Hazard reactions	non known

SECTION 11. TOXICOLOGICAL INFORMATION

Summary
IF SWALLOWED: may cause gastrointestinal irritation
IF IN EYES: may cause eye irritation.
IF ON SKIN: may cause skin irritation.

Supporting Data

Acute	**Oral**	Using LD_{50}'s for ingredients, the Acute Toxicity Estimate (ATE) (oral) for the mixture is >5,000 mg/kg. Data considered includes: Potassium Sulphate 6600mg/kg (rat), Sodium chloride: 3000mg/kg (rat)
	Dermal	No evidence of dermal toxicity.
	Inhaled	No evidence of inhalation toxicity.
	Eye	The mixture is considered to be an eye irritant, because some of the ingredients (sodium chloride) present are considered eye irritants in more concentrated form.
	Skin	The mixture is considered to be a skin irritant, because some of the ingredients (potassium sulphate) present are considered skin irritants in more concentrated form.
Chronic	**Sensitisation**	No ingredient present at concentrations >0.1% is considered a sensitizer.
	Mutagenicity	No ingredient present at concentrations >0.1% is considered a mutagen.
	Carcinogenicity	No ingredient present at concentrations >0.1% is considered a carcinogen.
	Reproductive/ Developmental	No ingredient present at concentrations >0.1% is considered a reproductive or developmental toxicant or have any effects on or via lactation.
	Systemic	No ingredient present at concentrations >1% is considered a target organ toxicant.
	Aggravation of existing conditions	None known.

SECTION 12. ECOLOGICAL DATA

Summary
This mixture is not considered ecotoxic. In all cases prevent run-off to drains, sewers and waterways.

Supporting Data

Aquatic	Using EC_{50}'s for ingredients, the calculated EC_{50} for the mixture is > 100 mg/L.
Bioaccumulation	No data
Degradability	No data
Soil	No evidence of soil toxicity.
Terrestrial vertebrate	See acute toxicity.
Terrestrial invertebrate	No evidence of ecotoxicity towards terrestrial invertebrates.
Biocidal	No data
Environmental effect levels	No EELs are available for this mixture or ingredients.

SECTION 13. DISPOSAL CONSIDERATIONS

Restrictions	There are no product-specific restrictions, however, local council and resource consent conditions may apply, including requirements of trade waste consents.
Disposal method	Disposal of this product must comply with the Hazardous Substances (Disposal) Notice 2017 and the requirements of the Resource Management Act for which approval should be sought from the Regional Authority. The substance must be treated and therefore rendered non-hazardous before discharge to the environment.

Contaminated packaging Disposal of contaminated packaging must comply with the Hazardous Substances (Disposal) Notice 2017 clause 12. Ensure that the package is rendered incapable of containing any substance and is disposed in a manner that is consistent with the requirements of the substance it contained and the material of the package. If possible reuse or recycle packaging.

SECTION 14. TRANSPORT INFORMATION

Land Transport Rule: Dangerous Goods 2005 – NZS 5433:2007
There are no specific restrictions for this product (not a dangerous good).

UN number:	NA	**Proper shipping name:**	NA
Class(es)	NA	**Packaging group:**	NA
Precautions:	NA	**Hazchem code:**	NA

SECTION 15. REGULATORY INFORMATION

This product is an approved substance under the Hazardous Substances and New Organisms Act (HSNO) Approval code: HSR002521, Animal Nutritional and Animal Care Products Group Standard 2017/2020. All ingredients appear on the New Zealand Inventory of Chemicals NZIoC.

Specific Controls

Key workplace requirements are:

SDS	To be available within 10 minutes in workplaces storing any quantity.
Inventory	An inventory of all hazardous substances must be prepared and maintained.
Packaging	All hazardous substances should be appropriately packaged including substances that have been decanted, transferred or manufactured for own use or have been supplied.
Labelling	Must comply with the Hazard Substances (Labelling) Notice 2017.
Emergency Plan	Not required.
Certified handler	Not required.
Tracking	Not required.
Bunding & secondary containment	Not required.
Signage	Not required.
Location compliance certificate	Not required.
Flammable zone	Not required.
Fire extinguisher	Not required.

Note: The above workplace requirements apply if only this particular substance is present. The complete set of controls for a location will depend on the classification and total quantities of other substances present in that location.

Other Legislation

In New Zealand, the use of this product may come under the Resource Management Act and Regulations, the Health and Safety at Work Act 2015 and the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, local Council Rules and Regional Council Plans.

SECTION 16. OTHER INFORMATION

Abbreviations

Approval Code	Approval HSR002521, Animal Nutritional and Animal Care Products Group Standard 2020 Controls, EPA www.epa.govt.nz
CAS Number	Unique Chemical Abstracts Service Registry Number
EC_{50}	Ecotoxic Concentration 50% **-** concentrations in water which is fatal to 50% of a test population (e.g. daphnia, fish species)
EPA	Environmental Protection Authority (New Zealand)
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
HAZCHEM Code	Emergency action code of numbers and letters that provide information to emergency services, especially fire fighters
HSNO	Hazardous Substances and new Organisms (Act and Regulations)
IARC	International Agency for Research on Cancer
LEL/UEL	Lower Explosive Limit/ Upper Explosive Limit
LD50	Lethal Dose 50% - dose which is fatal to 50% of a test population (usually rats).
LC50	Lethal Concentration 50% - concentration in air which is fatal to 50% of a test population (usually rats).
MSDS (SDS)	Material Safety Data Sheet (or Safety Data Sheet)
NZIoC	New Zealand Inventory of Chemicals
STEL	Short Term Exposure Limit – The maximum airborne concentration of a chemical or biological agent to which a worker may be exposed in any 15 minute period, provided the TWA is not exceeded.
TWA	Time Weighted Average – generally referred to WES averaged over typical work day (usually 8 hours)
UN Number	United Nations Number
WES	Workplace Exposure Standard – The airborne concentration of a biological or chemical agent to which a worker may be exposed during work hours (usually 8 hours, 5 days a week). The WES relates to exposure that has been measured by personal monitoring using procedures that gather air samples in the worker's breathing zone.

References

Data	Unless otherwise stated comes from the EPA HSNO chemical classification information database (CCID).
Controls	EPA notices, www.epa.govt.nz, Health and Safety at Work (Hazardous Substances) Regulations 2017, www.legislation.govt.nz
WES	The latest NZ Workplace Exposure Standards, published by WorkSafe NZ and available on their website – www.worksafe.govt.nz.
Other References:	Suppliers SDS, EU ECHA, ingredients SDS's, ChemIDplus

Review

Date	**Reason for review**
February 2021	Not applicable – new SDS

DISCLAIMER
The data in this SDS relates only to the specific material designated herein and does not relate to use in combination with any other material. The information is provided in good faith based on current knowledge and experience. No warranty with regard to the product properties is expressed or implied.