Safety Data Sheet

According to Hazardous Substances (Safety Data Sheets) Notice 2017 and Amendments under New Zealand, Hazardous Substances and New Organisms Act 1996 and Amendments.

Initial preparation date: 13.10.2021
Revision Date: 08.05.2026

Somulose

SECTION 1: Identification

Product identifier

Product name: Somulose
Synonyms: Somulose solution for injection

Recommended use and restriction on use:

Recommended use: VETERINARY USE: For the euthanasia in dogs, cats, horses and cattle.
Restrictions on use: Not for human use. Control drug (Schedule 2). This is potent drug, which is highly toxic to humans.

Manufacturer or supplier details

Supplier

Dechra Veterinary Products NZ Limited
PO Box 1604,
Paraparaumu Beach, 5252
New Zealand
Phone: 0800 479 838
Email: info.nz@dechra.com
Website: http://www.dechra.co.nz/

Emergency telephone number:

New Zealand
National Poisons Centre
0800 764 766

SECTION 2: Hazard identification

Not classified as a Dangerous Good according to NZS 5433:2020 Transport of Dangerous Goods on Land.

Classification in accordance with the Hazardous Substances (Hazard Classification) Notice 2020 and GHS Revision 7:

Hazard classification:

Flammable liquids, category 3
Acute toxicity (dermal), category 3
Acute toxicity (inhalation), category 3
Acute toxicity (oral), category 4
Eye irritation, category 2A
Skin sensitization, category 1
Reproductive toxicity, category 2
Chronic aquatic hazard, category 3

Label elements

Hazard pictogram(s):

Signal word: Danger

Hazard statements:

H226 Flammable liquid and vapour
H331 Toxic if inhaled
H302 Harmful if swallowed
H311 Toxic in contact with skin
H319 Causes serious eye irritation
H317 May cause an allergic skin reaction
H361 Suspected of damaging fertility or the unborn child
H412 Harmful to aquatic life with long lasting effects

Precautionary statements:

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P233 Keep container tightly closed
P280 Wear eye protection/face protection
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical, ventilating, and lighting equipment.
P242 Use non-sparking tools
P243 Take action to prevent static discharges
P261 Do not breathe mist, vapours or spray.
P264 Wash any 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
P272 Contaminated work clothing should not be allowed out of the workplace
P273 Avoid release to the environment
P301+P312 IF SWALLOWED: Call a POISON CENTER if you feel unwell
P330 Rinse mouth
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower
P312 Call a POISON CENTER if you feel unwell
P333+P313 If skin irritation or rash occurs: Get medical advice and attention.
P321 Specific treatment (see Sections 4-8 of this SDS and any supplemental information on the product label).
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 or attention.
P363 Wash contaminated clothing before reuse
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P311 Call a POISON CENTER.
P308+P313 If exposed or concerned: Get medical attention.
P370+P378 In case of fire: Use agents recommended in Section 5 to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool
P501 Dispose of contents and container in accordance with local, regional, national, and international regulations

Hazards not otherwise classified:

None.

SECTION 3: Composition/information on ingredients

Substance: Not applicable.

Mixture:

Identification	Name	Weight %
CAS number: 309-43-3	Quinalbarbitone sodium	40
CAS number: 57-55-6	Propane-1,2-diol	7-13
CAS number: 64-17-5	Ethanol	7-13
CAS number: 61-12-1	Cinchocaine hydrochloride	2.5

Additional information:

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret under the provisions of section 55 (7) of the HSNO Act.

SECTION 4: First-aid measures

For advice, contact a Poisons Information Center (e.g. phone Australia 131 126, New Zealand 0800 764 766) or a doctor.

Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

After inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention.

After skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After eye contact:

Rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

After swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most important symptoms and effects, both acute and delayed:

Acute symptoms and effects:

Eye contact may result in irritation, redness, pain, inflammation, itching, burning and tearing.
Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis.
This product is harmful if swallowed. This product is toxic if inhaled or in contact with skin. Exposure may lead to dizziness, drowsiness, headache, breathing difficulties, nausea, vomiting, abdominal pain, and lowering of consciousness. Adverse effects are dependent on exposure (dose, concentration, contact time).

Delayed symptoms and effects:

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death.
Symptoms of exposure may be delayed.

Immediate medical attention and special treatment:

Immediate medical attention:

Over-exposure via inhalation, ingestion or skin contact requires prompt medical attention.

Special treatment:

Not determined or not available.

Notes for the doctor:

Treat symptomatically. Symptoms of exposure may be delayed. Therefore, medical observation is indicated.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards arising from the chemical:

Flammable liquid. Will be easily ignitable by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.

Special protective equipment and precautions for firefighters

Protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Precautions:

Evacuate non-essential personnel. Ventilate closed spaces before entering. Consider initial evacuation for 300 meters in all directions. If tank/rail car is involved in the fire, ISOLATE for 800 meters in all directions. Fight fire from a maximum distance. Move containers from fire area if you can do it without risk. Use water spray/fog for cooling fire exposed containers. Withdraw immediately in case of rising sound from venting safety devices or

discoloration of tank. Always stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles. If this is impossible, withdraw from area and let fire burn. Stand by, at a safe distance, with extinguisher ready for possible re-ignition. A vapor-suppressing foam may be used to reduce vapors. Avoid unnecessary run-off of extinguishing media which may cause pollution. Do not handle damaged containers unless specialized to do so.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. All equipment used when handling the product must be grounded. Wear recommended personal protective equipment (see Section 8). Do not get on skin, eyes or on clothing. Do not breathe mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling. Remove contaminated clothing with proper techniques in order to prevent contact with skin or eyes. Place contaminated clothing in a sealed container for future disposal.

Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Advice on how to contain and clean up a spill or release:

Harmful if swallowed. Toxic in contact with skin or if inhaled. Put on appropriate personal protective equipment, including a self-contained breathing apparatus (see Section 8) before entering area of spill or leak. Avoid breathing dust, mist, fumes, vapors or spray. Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

SECTION 7: Handling and storage

Precautions for safe handling:

Toxic in contact with skin or if inhaled. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not handle material unless wearing appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Do not breathe mist/vapor/spray. Do not eat, drink, smoke, or use personal products when handling chemical substances. Prevent contact with skin, eyes and clothing. Handle with caution. Do not handle broken or punctured containers. Immediately report spills, leaks or problems with hazard control measures. Wash thoroughly after.

Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location between 10 °C - 25 °C out of direct sunlight and away from exit paths. Protect from frost. Inspect containers and storage area regularly for signs of leak and damage. Store containers at a convenient height for handling, below eye level if possible. High shelving increases the risk of dropping containers, personal injury and exposure. Ensure that appropriate fire fighting and spill-clean up equipment is readily available. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Store separately. Keep container tightly sealed. Store away from incompatible materials (See Section 10).

Container Type: 25 ml and 50 ml in amber type I glass vials, with red chlorobutyl rubber stoppers and aluminium seals in cardboard box cartons.

SECTION 8: Exposure controls/personal protection

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
New Zealand	Propane-1,2-diol	57-55-6	8-hour TWA: 10 mg/m3 (particulates only)
	Propane-1,2-diol	57-55-6	8-hour TWA: 474 mg/m3 (particulates and vapor)
	Ethanol	64-17-5	8-hour TWA: 380 mg/m3 (ototoxin)
	Ethanol	64-17-5	15-min STEL: 1520 mg/m3 (ototoxin)

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Engineering controls:

Toxic in contact with skin or if inhaled. Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protective equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Slightly straw coloured liquid
Odour	Odourless
Odour threshold	Not determined or not available.
pH	Not determined or not available.

Melting point/freezing point	156 °C - 161 °C (For Quinalbarbitone sodium), 96 °C-100 °C (For Cinchocaine HCl)
Initial boiling point/range	Not determined or not available.
Flash point	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapour pressure	Not determined or not available.
Vapour density	Not determined or not available.
Relative density	Not determined or not available.
Solubility(ies)	Miscible in water
Partition coefficient: n-octanol/water	Not determined or not available.
Auto-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Particle characteristics	Not determined or not available.

Other information:

Flammable Liquids	Flammable liquid and vapour.

SECTION 10: Stability and reactivity

Chemical reactivity:
Not reactive under recommended handling and storage conditions.

Chemical stability:
Stable under recommended handling and storage conditions.

Possibility of hazardous reactions:
Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to avoid:
Extreme heat, open flames, hot surfaces, sparks, ignition sources, static electricity and incompatible materials.
Vapor accumulation in low or confined areas.

Incompatible materials:
Oxidizing agents.

Hazardous decomposition products:
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity:

Assessment:

Harmful if swallowed.
Toxic in contact with skin.
Toxic if inhaled.

Somulose

Product data:

Route	Result
Oral ATE	LD50 Rat: 307 mg/kg (Calculated)
Dermal ATE	LD50 Rabbit: 751 mg/kg (Calculated)
Inhalation ATE	LC50 Rat: 7.50 mg/L (4hr [vapour]; (Calculated))

Substance data:

Name	Route	Result
Quinalbarbitone sodium	oral	LD50 Rat: 125 mg/kg
	Dermal ATE	LD50 Rabbit: 300 mg/kg
	Inhalation ATE	LC50 Rat: 3 mg/L (4hr [vapour])
Propane-1,2-diol	oral	LD50 Rat: 22,000 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: > 44.9 mg/L (4hr [vapour])
Ethanol	oral	LD50 Rat: 10,470 mg/kg
	inhalation	LC50 Rat: 116.9 mg/L (4 hr [vapor])
	dermal	LD50 Rabbit: 17,100 mg/kg
Cinchocaine hydrochloride	Oral ATE	LD50 Rat: 500 mg/kg

Skin corrosion/irritation

Assessment:

Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Serious eye damage/irritation

Assessment:

Causes serious eye irritation.

Product data: No data available.

Substance data:

Name	Result
Ethanol	Causes serious eye irritation.
Cinchocaine hydrochloride	Causes serious eye damage.

Respiratory or skin sensitization:

Assessment:

May cause an allergic skin reaction

Product data: No data available.

Substance data:

Name	Result
Cinchocaine hydrochloride	May cause an allergic skin reaction.

Carcinogenicity

Assessment:

Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Ethanol	Group 1

Germ cell mutagenicity

Assessment:

Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment:

Suspected of damaging fertility or the unborn child.

Product data: No data available.

Substance data:

Name	Result
Quinalbarbitone sodium	Suspected of damaging fertility or the unborn child.

Specific target organ toxicity (single exposure)

Assessment:

Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment:

Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment:

Based on available data, the classification criteria are not met**.**

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure:

Inhalation; Ingestion; Skin contact; Eye contact.

Symptoms related to the physical, chemical and toxicological characteristics:

Refer to Section 4 of this SDS.

Other information:

No additional information.

SECTION 12: Ecological information

Ecotoxicity

Aquatic

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

Name	Result
Propane-1,2-diol	Fish LC50 Oncorhynchus mykiss: 51,600 mg/L (96 hr)
	Aquatic Plants EC50 Raphidocelis subcapitata: 19000 mg/L (96 hr [growth rate])
	Aquatic Invertebrates EC50 Daphnia magna: 43,500 mg/L (48 hr [Immobilisation])
Ethanol	Fish LC50 Pimephales promelas: 15,300 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >10,000 mg/L (48 hr [mobility; read-across substance data])
	Aquatic Plants EC50 Chlorella vulgaris: 275 mg/L (72 hr [growth rate])
	Bacteria LC50 Paramaecium caudatum: 5,800 mg/L (4 hr)

Chronic (long-term) toxicity

Assessment:

Harmful to aquatic life with long lasting effects.

Product data: No data available.

Substance data:

Name	Result
Propane-1,2-diol	Aquatic Invertebrates NOEC Ceriodaphnia sp.: 13,020 mg/L (7 d [reproduction])
Ethanol	Aquatic Invertebrates NOEC Daphnia Magna: 9.6 mg/L (10 d [reproduction])
	Fish NOEC Danio rerio: 250 mg/L (5 d)

Terrestrial

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met**.**

Product data: No data available.

Substance data: No data available

Chronic (long-term) toxicity

Assessment: Based on available data, the classification criteria are not met**.**

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Propane-1,2-diol	The substance is readily biodegradable. 81.7% degradation in water, measured by CO2 evolution, after 28 days.
Ethanol	The substance is readily biodegradable. 84% degradation measured by O2 consumption, after 20 days.

Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Propane-1,2-diol	The substance is not expected to bioaccumulate (BCF: 0.09).
Ethanol	The substance is not expected to bioaccumulate in organisms (estimated BCF: 3).

Mobility in soil

Product data: No data available.

Substance data:

Name	Result
Propane-1,2-diol	The substance is highly mobile, therefore, adsorption to soil and sediment is not expected (calculated Koc: 2.9).
Ethanol	The substance is highly mobile, therefore, adsorption to soil and sediment is not expected (log Koc: 0.2).

Other adverse effects: No additional information.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. Dispose of in accordance with all applicable local, regional and international regulations.

Special precautions to be taken during disposal:

No additional information.

Disposal methods that should not be used:

No additional information.

SECTION 14: Transportation information

Road/Rail transport: (NZS 5433)

UN number	UN 3248
UN proper shipping name	Medicine, liquid, flammable, toxic, n.o.s. (Ethanol, Quinalbarbitone sodium)
UN transport hazard class(es)	6.1 (3) 
Packing group	III
Environmental hazards	None
Special precautions for user	None
Hazchem/Emergency Action Code	3WE

International Air Transport Association Dangerous Goods Regulations (IATA-ICAO)

UN number	UN 3248
UN proper shipping name	Medicine, liquid, flammable, toxic, n.o.s., (Ethanol, Quinalbarbitone sodium)
UN transport hazard class(es)	6.1 (3) 
Packing group	III
Environmental hazards	None
Special precautions for user	None
ERG code	3P
Excepted quantities	E1
Passenger and cargo	60 L
Cargo aircraft only	220 L
Limited quantity	2 L

International Maritime Dangerous Goods (IMDG)

UN number	UN 3248
UN proper shipping name	Medicine, liquid, flammable, toxic, n.o.s. (Ethanol, Quinalbarbitone sodium)
UN transport hazard class(es)	6.1 (3) 
Packing group	III
Environmental hazards	None
Special precautions for user	None
EMS number	F-E, S-D
Stowage category	A
Excepted quantities	E1
Limited quantity	5 L

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not Applicable

SECTION 15: Regulatory information

New Zealand Inventory of Chemicals (NZIoC): All ingredients are listed or exempt.

HSNO approval number: HSR100757

Group Standard Title: Veterinary Medicines (Limited Pack Size, Finished Dose) Group Standard 2020.

HSNO Controls

Approved handler test certificate: Not determined.

Tracking: Not determined.

Controlled substance license requirements: Not applicable.

Agricultural Compounds and Veterinary Medicines Act 1997:

ACVM number	A11412

Montreal Protocol (Ozone Depleting Substances): None of the ingredients are listed.

Stockholm Convention (Persistent Organic Pollutants): None of the ingredients are listed.

Rotterdam Convention (Prior Informed Consent): None of the ingredients are listed.

Basel Convention (Hazardous Waste): None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms:

ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
EC50	Effective Concentration of 50%
GHS	Globally Harmonized System
HSNO	Hazardous Substances and New Organisms
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
MARPOL	International Convention for the Prevention of Pollution from Ships
NZIoC	New Zealand Inventory of Chemicals
TWA	Time Weighted Average
UN	United Nations
VOC	Volatile Organic Compounds

Disclaimer:

The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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Revision Notes:

Revision Date	Notes
08-05-2026	Version 3 (Supersedes Version 2: 27 March 2026)

End of Safety Data Sheet