

CRM-NEO-e

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022
Issue date: 2026-04-01 Revision date: 2026-04-01 Version: 1.0

SECTION 1 Identification

1.1. Product identifier

Product form : Mixture
Product name : CRM-NEO-e
Product code : Not available

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Use of the substance/mixture : Calibration Solution Certified Reference Material for Neosaxitoxin, for laboratory use only

1.4. Supplier's details

National Research Council Canada
1411 Oxford Street
Halifax, Nova Scotia, Canada B3H 3Z1
T 1-902-426-8281



National Research
Council Canada

Conseil national de
recherches Canada

1.5. Emergency phone number

Emergency number : Infotrac:
Within North America 1-800-535-5053
International +1-352-323-3500

SECTION 2 Hazard identification

2.1. Classification of the substance or mixture

GHS classification

Not classified.

2.2. Label elements

GHS labelling

No labelling applicable

2.3. Hazards associated with known or reasonably anticipated uses

No additional information available

2.4. Hazards not otherwise classified

No additional information available

2.5. Unknown acute toxicity

No additional information available

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SECTION 3 Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Chemical name / Synonyms	Product identifier	Conc. (% w/w)
Water	AQUA	CAS-No.: 7732-18-5	99.99
Neosaxitoxin (NEO)	Neosaxitoxin (NEO)	CAS-No.: 64296-20-4	0.00188
Hydrochloric acid	Muriatic acid / Hydrogen chloride / Hydrochloric acid, anhydrous	CAS-No.: 7647-01-0	0.0018

SECTION 4 First-aid measures

4.1. Description of necessary first-aid measures

First-aid measures after inhalation	: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: If skin irritation occurs: Wash skin with plenty of water. Obtain medical attention if irritation persists.
First-aid measures after 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.
First-aid measures after ingestion	: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	: May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	: May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	: May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. If sufficient quantities are ingested, neosaxitoxin can cause paresthesia (numbness), paralysis, respiratory arrest, and even death.

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Other medical advice or treatment	: Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
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SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media : Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6 Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

For non-emergency personnel

No additional information available

For emergency responders

Environmental precautions : Prevent entry to sewers and public waters.

6.2. Methods and materials for containment and cleaning up

For containment : Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.

Methods for cleaning up : Sweep or shovel spills into appropriate container for disposal. Provide ventilation.

For further information refer to section 8: "Exposure controls/personal protection"

SECTION 7 Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust, fume, gas, mist, vapours, spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including incompatibilities

Storage conditions : Keep out of the reach of children. Keep container tightly closed. Store in a dry, cool and well-ventilated place. Store at +4 °C / 39.2 °F.

SECTION 8 Exposure controls/personal protection

8.1. Control parameters

CRM-NEO-e	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

Neosaxitoxin (NEO) (64296-20-4)	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

Hydrochloric acid (7647-01-0)	
USA - ACGIH® - Threshold Limit Values	
ACGIH® TLV® C	2 ppm
USA - OSHA - Occupational Exposure Limits	
OSHA PEL C	7 mg/m ³
OSHA PEL C	5 ppm
USA - IDLH - Occupational Exposure Limits	
IDLH	50 ppm
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL C	7 mg/m ³
NIOSH REL C	5 ppm

Water (7732-18-5)	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

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8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures, such as personal protective equipment

Hand protection:

Wear suitable gloves. Consult glove manufacturer's product information on material suitability and material thickness.

Eye protection:

Safety glasses or goggles are recommended when using product.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. SDSs cannot provide detailed and complete respiratory protection guidelines. Selection of respiratory protection must be done by a qualified person who has assessed the work environment.

Other information:

Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9 Physical and chemical properties

9.1. Basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear
Colour	: Colourless
Odour	: No odour
Odour threshold	: No data available
pH	: 3.4
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20°C/ 68 °F	: No data available
Relative density	: 0.998 g/mL
Solubility	: No data available

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Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Explosive limits	: No data available
Particle characteristics	: No data available

9.2. Data relevant with regard to physical hazard classes (supplemental)

No additional information available

SECTION 10 Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11 Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified Based on available data, the classification criteria are not met.
Acute toxicity (dermal)	: Not classified Based on available data, the classification criteria are not met.
Acute toxicity (inhalation)	: Not classified Based on available data, the classification criteria are not met.

Hydrochloric acid (7647-01-0)

LD50 oral rat	238 – 277 mg/kg (Source: JAPAN_GHS)
LD50 dermal rabbit	> 5010 mg/kg (Source: JAPAN_GHS)

Water (7732-18-5)

LD50 oral rat	> 90 mL/kg (Source: FOOD_JOURN)
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Neosaxitoxin (NEO) (64296-20-4)

LD50 intraperitoneal, mouse	2.8 µg/kg
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Skin corrosion/irritation : Based on available data, the classification criteria are not met..
pH: 3.4

Hydrochloric acid (7647-01-0)

pH	1.1 (conc: 0.1 N solution)
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Serious eye damage/irritation : Based on available data, the classification criteria are not met..
pH: 3.4

Hydrochloric acid (7647-01-0)

pH	1.1 (conc: 0.1 N solution)
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Respiratory or skin sensitisation : Based on available data, the classification criteria are not met..
Germ cell mutagenicity : Based on available data, the classification criteria are not met..
Carcinogenicity : Based on available data, the classification criteria are not met..

Hydrochloric acid (7647-01-0)

IARC group	3 - Not classifiable
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Reproductive toxicity : Based on available data, the classification criteria are not met..
STOT-single exposure : Based on available data, the classification criteria are not met..

Hydrochloric acid (7647-01-0)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure : Based on available data, the classification criteria are not met..
Aspiration hazard : Based on available data, the classification criteria are not met..
Symptoms/effects after inhalation : May cause irritation to the respiratory tract.
Symptoms/effects after skin contact : May cause skin irritation. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. If sufficient quantities are ingested, neosaxitoxin can cause paresthesia (numbness), paralysis, respiratory arrest, and even death.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

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SECTION 12 Ecological information

12.1. Ecotoxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.
Hazardous to the aquatic environment, short-term (acute) : Not classified
Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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Neosaxitoxin (NEO) (64296-20-4)

Persistence and degradability	Rapidly degradable
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Hydrochloric acid (7647-01-0)

Persistence and degradability	Rapidly degradable
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Water (7732-18-5)

Persistence and degradability	Rapidly degradable
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13 Disposal considerations

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14 Transport information

In accordance with DOT / TDG

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14.1. UN Number

UN-No. (DOT) : Not regulated
UN-No. (TDG) : Not regulated

14.2. UN Proper Shipping Name

Proper Shipping Name (DOT) : Not regulated
Proper Shipping Name (TDG) : Not regulated

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : Not regulated

TDG
Transport hazard class(es) (TDG) : Not regulated

14.4. Packing group

Packing group (DOT) : Not regulated
Packing group (TDG) : Not regulated

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Transport in bulk

Not applicable

14.7. Special precautions for user

DOT
Not regulated

TDG
Not regulated

SECTION 15 Regulatory information

15.1. Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Neosaxitoxin (NEO)	CAS-No. 64296-20-4
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All components of this product are listed, or excluded from listing, on the Canadian DSL (Domestic Substances List) and NDSL (Non-Domestic Substances List) inventories except for:

Neosaxitoxin (NEO)	CAS-No. 64296-20-4
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15.2. International regulations

No additional information available

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15.3. State regulations

No additional information available

SECTION 16 Other Information

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2024 and the Hazardous Products Regulations (HPR) WHMIS 2022

Revision date : 2026-04-01
Issue date : 2026-04-01
Other information : None
Version # : 1.0
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com



SDS HazCom 2024 - WHMIS 2022 (Nexreg) 2026 NRC

DISCLAIMER:

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