CRM-STX-g Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015 Issue date: 2021-03-24 Revision date: 2021-03-24 Version: 1.0

.1. Product identifier			
Product form	: Mixture		
Product name	: CRM-STX-g		
Product code	: Not available		
1.2. Relevant identified uses of the	substance or mixture	and uses advised agair	nst
Use of the substance/mixture	: Certified Calibration S use only	olution for Saxitoxin Dihy	/drochloride, for laboratory
1.3. Details of the supplier of the sa	afety data sheet		
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
1.4. Emergency telephone number			
Emergency number	: CANUTEC 1-613-996	-6666	
SECTION 2: Hazards identification			
2.1. Classification of the substance	e or mixture		
GHS classification			
Not classified			
2.2. Label elements			
GHS labelling			
No labelling applicable			
2.3. Other hazards			
No additional information available			
2.4. Unknown acute toxicity (GHS)			
Not applicable			
SECTION 3: Composition/information	on ingredients		
3.1. Substances			
Not applicable			
3.2. Mixtures			
Name		Product identifier	% (by weight)
Water		(CAS-No.) 7732-18-5	99.99
Saxitoxin Dihydrochloride		(CAS-No.) 35554-08-6	
Hydrochloric acid		(CAS-No.) 7647-01-0	0.0018

4.1. Description of first aid measur	'es
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.



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

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 and effects, both 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 stomach distress, nausea or vomiting. If sufficient quantities are ingested, Saxitoxin Dihydrochloride

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

causes paresthesia (numbness), paralysis, respiratory arrest.

SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None known.
5.2. Special hazards arising from t	he substance or mixture
Fire hazard	: Products of combustion may include, and are not limited to: oxides of carbon.
5.3. Advice for firefighters	
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 measured	ures
6.1. Personal precautions, protect	ive 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.
6.2. Methods and material for cont	ainment and cleaning up
For containment	Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for cleaning up	: Sweep or shovel spills into appropriate container for disposal. Provide ventilation.
6.3. Reference to other sections	
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.



CRM-STX-g Safety Data Sheet

tion Standard (CER29 1910 1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Hygiene measures	: Wash contaminated clothing before reuse. Always wash hands after handling the product.
2.2. Conditions for safe s	torage, including any incompatibilities
Storage conditions	: Keep out of the reach of children. Keep container tightly closed.
Storage temperature	: +4 °C / +39.2 °F
ECTION 8: Exposure contro	bls/personal protection
3.1. Control parameters	
Hydrochloric acid (7647-0	1-0)
USA - ACGIH - Occupation	al Exposure Limits
ACGIH OEL C [ppm]	2 ppm
ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA - OSHA - Occupation	al Exposure Limits
OSHA PEL C	7 mg/m³
OSHA PEL C [ppm]	5 ppm
USA - IDLH - Occupationa	Exposure Limits
IDLH [ppm]	50 ppm
USA - NIOSH - Occupation	al Exposure Limits
NIOSH REL C	7 mg/m³
NIOSH REL C [ppm]	5 ppm

Saxitoxin Dihydrochloride (35554-08-6)	
ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable
Water (7732-18-5)	
ACGIH	Not applicable

ACGIH	Not applicable
OSHA	Not applicable
IDLH	Not applicable
NIOSH	Not applicable

Exposure controls 8.2.

Appropriate engineering controls	: Ensure good ventilation of the work station.
Hand protection	: Wear suitable gloves.
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.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015			
SECTION 9: Physical and chemical properties			
9.1. Information on basic physical and chemical properties			
Physical state	: Liquid		
Appearance	: Clear colourless liquid		
Colour	: Colourless		
Odour	: None		
Odour threshold	: No data available		
рН	: 3		
Melting point	: No data available		
Freezing point	: No data available		
Boiling point	: No data available		
Flash point	: No data available		
Relative evaporation rate (butyl acetate=1)	: 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	: No data available		
Density	: 1 g/mL		
Solubility	: No data available		
Partition coefficient n-octanol/water	: No data available		
Auto-ignition temperature	: No data available		
Decomposition temperature	: No data available		
Viscosity, kinematic	: No data available		
Viscosity, dynamic	: No data available		
Explosive limits	: No data available		
Explosive properties	: No data available		
Oxidising properties	: No data available		

9.2. Other information

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. Incompatible materials.

10.5. Incompatible materials

Metals. Bases. Amines. Oxides. Carbonates. Cyanides. Sulfides. Sulfites. Formaldehyde.

10.6. Hazardous decomposition products

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

EN (English)



Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 11: Toxicological information		
11.1. Information on toxicolo	gical effects	
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	

Water (7732-18-5)	
LD50 oral rat	> 90 mL/kg
Hydrochloric acid (7647-01-0)	
LD50 oral rat	238 – 277 mg/kg
LD50 dermal rabbit	> 5010 mg/kg
LC50 inhalation rat	1.68 mg/L (Exposure time: 1 h)
Saxitoxin Dihydrochloride (35554-0	08-6)
LD50 oral mouse	0.263 mg/kg
Skin corrosion/irritation	: Not classified
	pH: 3
Serious eye damage/irritation	: Not classified
	рН: 3
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Hydrochloric acid (7647-01-0)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
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 stomach distress, nausea or vomiting. If sufficient quantities are ingested, Saxitoxin Dihydrochloride causes paresthesia (numbness), paralysis, respiratory arrest.
Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye.
ECTION 12: Ecological information	
2.1. Toxicity	
Ecology - general	: May cause long-term adverse effects in the aquatic environment.

CRM-STX-g	2.2. Persistence and degradability	12.2.
	CRM-STX-g	CRM
Persistence and degradability Not established.	Persistence and degradability	Pers

EN (English)



Safety Data Sheet according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

	29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015
12.3. Bioaccumulative potential	
CRM-STX-g	
Bioaccumulative potential	Not established.
12.4. Mobility in soil	
No additional information available	
12.5. Other adverse effects	
No additional information available	
SECTION 13: Disposal consideration	
13.1. Waste treatment methods	
Product/Packaging disposal	: This material must be disposed of in accordance with all local, state,
recommendations	provincial, and federal regulations. The generation of waste should be avoided or minimized wherever possible.
SECTION 14: Transport information	
Department of Transportation (DOT)	and Transportation of Dangerous Goods (TDG)
In accordance with DOT/TDG	
Not regulated for transport	
Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Do not handle until all safety precautions have been read and understood.
· · · ·	
SECTION 15: Regulatory information	
15.1. Federal regulations	
All components of this product are lis Agency Toxic Substances Control A	sted, or excluded from listing, on the United States Environmental Protection ct (TSCA) inventory except for:
Saxitoxin Dihydrochloride	CAS-No. 35554-08-6
	sted, or excluded from listing, on the Canadian DSL (Domestic Substances
List) and NDSL (Non-Domestic Subs Saxitoxin Dihydrochloride	CAS-No. 35554-08-6
Saxioxin Dinyarochionae	
Hydrochloric acid (7647-01-0)	
Listed on the United States SARA S	ection 302
Subject to reporting requirements of	
CERCLA RQ	5000 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	500 lb (gas only)
SARA Section 313 - Emission Reporting	1.0 % (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)
15.2 US State regulations	
No additional information available	

No additional information available



Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

SECTION 16: Other information	
Issue date	: 2021-03-24
Revision date	: 2021-03-24
Version #	: 1.0
Prepared by	: Nexreg Compliance Inc.

DISCLAIMER:

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

This material is for research and experimental applications only. It is not intended for food, drug, household, agricultural, or cosmetic use. Its use must be supervised by technically qualified individuals with experience in the handling of potentially hazardous chemicals. Apart from the solvent in this product (if applicable), the hazardous components present in the solution are at such low concentrations that exact determination of degree of hazard is not warranted and would be misleading. We shall not be held liable for any damage resulting from handling or from contact with the above product.