CHEMTRADE

Sodium Chloride Solution

Safety Data Sheet

According to U.S. Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations and according to Canada's Hazardous Products Regulation, February 11, 2015.

Date of Issue: 07/18/2017 Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Sodium Chloride Solution

Synonyms: Brine Solution
Intended Use of the Product

Stock source of chloride for electrolytic processes, soap manufacture, metallurgy, food preservative and seasoning, highway de-ice

and many other applications.

Name, Address, and Telephone of the Responsible Party

Manufacturer

CHEMTRADE LOGISTICS INC. 155 Gordon Baker Road

Suite 300

Toronto, Ontario M2H 3N5 For SDS Info: (416) 496-5856 www.chemtradelogistics.com

Emergency Telephone Number

Emergency Number : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300

INTERNATIONAL: +1-703-741-5970

Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC - Day or Night

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification

Not classified

Label Elements

GHS Labeling

No labeling applicable

Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown acute toxicity

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Water	(CAS-No.) 7732-18-5	70 - 80	Not classified
Sodium chloride	(CAS-No.) 7647-14-5	20 - 30	Not classified

^{*}Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

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Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists.

Ingestion: Rinse mouth. Do not induce vomiting. Get medical advice/attention if you feel unwell.

Most Important Symptoms and Effects both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes. **Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: None expected under normal conditions of use.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

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

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire. **Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Halogenated compounds and metal oxides.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Ventilate area.

Environmental Precautions

Prevent entry to soil, sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into soils, sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, and spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

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Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong oxidizers. Strong acids. Slightly reactive or incompatible with steel and iron.

Specific End Use(s)

Stock source of chloride for electrolytic processes, soap manufacture, metallurgy, food preservative and seasoning, highway deicer and many other applications.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Safety glasses or chemical safety goggles.







Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye Protection: Safety glasses or chemical safety goggles. **Skin and Body Protection:** Wear suitable protective clothing.

Respiratory Protection: If irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State : Liquid
Appearance : Clear
Odor : Odorless
Odor Threshold : Not available

pH : 6-11

Evaporation Rate Not available 0 °C (32 °F) **Melting Point Freezing Point** Not available **Boiling Point** 107 °C (224.6 °F) Flash Point Not applicable **Auto-ignition Temperature** Not applicable **Decomposition Temperature** Not available Flammability (solid, gas) Not applicable **Lower Flammable Limit** Not applicable **Upper Flammable Limit** Not applicable **Vapor Pressure** Not available Relative Vapor Density at 20°C Not available **Relative Density** Not available

Specific Gravity : 1.2

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Solubility : Easily soluble in the following materials: cold water and hot water.

Partition Coefficient: N-Octanol/Water : Not available Viscosity : Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids. Strong oxidizers.

Hazardous Decomposition Products: Thermal decomposition generates: Halogenated compounds. Metal oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

<u>Information on Toxicological Effects - Product</u>

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Not classified

pH: 6 - 11

Eye Damage/Irritation: Not classified

pH: 6 - 11

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Effects After Inhalation: Prolonged exposure may cause irritation. **Symptoms/Effects After Skin Contact:** Prolonged exposure may cause skin irritation.

Symptoms/Effects After Eye Contact: May cause slight irritation to eyes. **Symptoms/Effects After Ingestion:** Ingestion may cause adverse effects. **Chronic Symptoms:** None expected under normal conditions of use.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Sodium chloride (7647-14-5)	
LD50 Oral Rat	3 g/kg
LC50 Inhalation Rat	> 42 g/m³ (Exposure time: 1 h)

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

Sodium chloride (7647-14-5)	
LC50 Fish 1	5560 (5560 - 6080) mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-
	through])
EC50 Daphnia 1	1000 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	12946 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 2	340.7 (340.7 - 469.2) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence and Degradability

Sodium Chloride Solution	
Persistence and Degradability	Not established.

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Bioaccumulative Potential

Sodium Chloride Solution	
Bioaccumulative Potential	Not established.
Sodium chloride (7647-14-5)	
BCF Fish 1	(no bioaccumulation)

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

Not regulated for transport according to: US DOT, IMDG, IATA, and Canada's TDG

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Chemical Name (CAS No.)	CERCLA RQ	EPCRA 304 RQ	SARA 302 TPQ	SARA 313
Sodium chloride (7647-14-5)	Not applicable	Not applicable	Not applicable	No

SARA 311/312 Not present

US TSCA Flags Not present

US State Regulations

California Proposition 65

Chemical Name (CAS No.)	Carcinogenicity	Developmental	Female Reproductive	Male Reproductive	
		Toxicity	Toxicity	Toxicity	
Sodium chloride (7647-14-5)	No	No	No	No	

State Right-To-Know Lists

Sodium chloride (7647-14-5)

- U.S. Massachusetts Right To Know List No
- U.S. New Jersey Right to Know Hazardous Substance List No
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List No
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances No
- U.S. Pennsylvania RTK (Right to Know) List No

Canadian Regulations

Sodium chloride (7647-14-5)

Listed on the Canadian DSL (Domestic Substances List)

Not listed on the Canadian NDSL (Non-Domestic Substances List)

International Inventories/Lists

Chemical Name (CAS No.)	Australia	Turkey	Korea	EU	EU	EU	EU	Mexico
	AICS	CICR	ECL	EINECS	ELINCS	SVHC	NLP	INSQ
Sodium chloride (7647-14-5)	Yes	Yes	Yes	Yes	No	No	No	Yes
Chemical Name (CAS No.)	China IECSC	Japan ENCS	Japan ISHL	Japan PDSCL	Japan PRTR	Philippines PICCS	New Zealand NZIOC	US TSCA
Sodium chloride (7647-14-5)	Yes	Yes	No	No	No	Yes	Yes	Yes

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SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 07/18/2017

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA

Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products

Regulations (HPR).

Revision Summary:

Section	Change	Date Changed	

LD50 - Median Lethal Dose

NFPA 704

NFPA Health Hazard : 0 - Materials that, under emergency conditions, would

offer no hazard beyond that of ordinary combustible

materials.

NFPA Fire Hazard : 0 - Materials that will not burn under typical dire

conditions..

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even

under fire conditions.

HMIS Rating

Health : 1 Irritation or minor reversible injury possible.

Flammability : 0 Minimal Hazard
Physical : 0 Minimal Hazard
PPE See Section 8

ACGIH - American Conference of Governmental Industrial Hygienists

Abbreviations and Acronyms

AICS – Australian Inventory of Chemical Substances LC50 - Median Lethal Concentration

AIHA – American Industrial Hygiene Association LOAEL - Lowest Observed Adverse Effect Level

ATE - Acute Toxicity Estimate

LOEC - Lowest-observed - effect Concentration

BCF - Bioconcentration factor Log Pow - Octanol/water Partition Coefficient
BEI - Biological Exposure Indices (BEI) NFPA 704 - National Fire Protection Association - Standard System for the

CAS No. - Chemical Abstracts Service number Identification of the Hazards of Materials for Emergency Response

CERCLA RQ - Comprehensive Environmental Response, Compensation, and NIOSH - National Institute for Occupational Safety and Health

Liability Act - Reportable Quantity

NLP - Europe No Longer Polymers List

CICR - Turkish Inventory and Control of Chemicals

NOAEL - No-Observed Adverse Effect Level

DOT – 49 CFR – US Department of Transportation – Code of Federal

NOEC - No-Observed Effect Concentration

Regulations Title 49 – Transportation.

EC50 - Median effective concentration

NZIOC - New Zealand Inventory of Chemicals

OEL - Occupational Exposure Limits

ECL - Korea Existing Chemicals List OSHA – Occupational Safety and Health Administration

EINECS - European Inventory of Existing Commercial Chemical Substances

PEL - Permissible Exposure Limits

ELINCS - European List of Notified Chemical Substances

PICCS - Philippine Inventory of Chemicals and Chemical Substances

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EmS - IMDG Emergency Schedule Fire & Spillage PDSCL - Japan Poisonous and Deleterious Substances Control Law ENCS - Japanese Existing and New Chemical Substances Inventory PPE - Personal Protective Equipment

EPA – Environmental Protection Agency PRTR - Japan Pollutant Release and Transfer Register

EPCRA 304 RQ – EPCRA 304 Extremely Hazardous Substance Emergency
Planning and Community Right-to-Know-Act – Reportable Quantity
ERAP Index – Emergency Response Assistance Plan Quantity Limit

ERAP Superfund Amendments and Reauthorization Act

ErC50 - EC50 in Terms of Reduction Growth Rate SARA 302 - Section 302, 40 CFR Part 355

ERG code (IATA) - Emergency Response Drill Code as found in the International SARA 311/312 - Sections 311 and 312, 40 CFR Part 370 Hazard Categories

Civil Aviation Organization (ICAO)

SARA 313 - Section 313, 40 CFR Part 372

ERG No. - Emergency Response Guide Number

SRCL - Specifically Regulated Carcinogen List

HCCL - Hazard Communication Carcinogen List
HMIS – Hazardous Materials Information System

SVHC – European Candidate List of Substa

HMIS – Hazardous Materials Information System

IARC - International Agency for Research on Cancer

TDG – Transport Canada Transport of Dangerous Goods Regulations

IATA - International Air Transport Association – Dangerous Goods RegulationsTLM - Median Tolerance LimitIDLH - Immediately Dangerous to Life or HealthTLV - Threshold Limit ValueIECSC - Inventory of Existing Chemical Substances Produced or Imported inTPQ - Threshold Planning Quantity

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China

IMDG - International Maritime Dangerous Goods Code
INSQ - Mexican National Inventory of Chemical Substances

ISHL - Japan Industrial Safety and Health Law

TSCA – United StatesToxic Substances Control Act

TWA - Time Weighted Average

WEEL - Workplace Environmental Exposure Levels

Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.



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