



SAFETY DATA SHEET – SODIUM CHLORIDE

REVISED 01/01/2020

SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Sodium Chloride (NaCl)

Synonyms: Salt

1.2 Relevant identified uses of the substance or mixture and uses advised against

Uses: MIEX System brine regeneration, water softener regeneration, On-site Sodium Hypochlorite Generation (OSHG) raw material

Uses Advised Against: Food, drug, pesticide or b

1.3 Details of the Supplier and of the Safety Data Sheet (SDS)

Odyssey Manufacturing Co.

1484 Massaro Boulevard

Tampa, Florida 33619

+1-813-635-0339 (24 hours)

1.4 Emergency telephone number:

1-800-ODYSSEY (Florida)

1-813-635-0339 (Outside Florida)

1-813-340-9093 (Control Room Cell Phone)

SECTION II - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

This chemical is not considered hazardous by the 2012 OSHA Hazard Communications Standard (29 CFR 1910.1200) nor is it considered a hazardous material by Transportation Standard (49 CFR Parts 100-185).

2.2 Label Elements

None

2.3 Hazards not otherwise classified (HNOC)

None

2.4 Other Information

May Be Harmful if swallowed in large quantities

SECTION III - COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

Chemical nature: Sodium Chloride

% by Weight (Wet Basis)	Ingredient	CAS Number
99.45	Sodium Hypochlorite	7647-14-5
0.2	Impurities	Various
0.25	Moisture	7732-18-5

3.2 Mixtures - Not applicable

SECTION IV - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product vapors or mists cause respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

Eyes: Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting upper and lower lids. Remove contact lenses after the first 5 minutes and continue washing. Obtain immediate medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Wash affected area with soap and water. Wash contaminated clothing and shoes thoroughly before reuse. Seek prompt medical attention if rash develops.

Ingestion: Rinse mouth with water and drink plenty of water afterwards. Get medical attention if feeling ill.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects – No Information Available

4.3 Indication of any immediate medical attention and special treatment needed

Note to Physicians – Treat Symptomatically

SECTION V - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use fire extinguishing media appropriate for local circumstances and surrounding environment.

Unsuitable methods of extinction: CAUTION – Use of spray water when fighting fire may be inefficient

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. Keep product away from heat and sources of ignition.

5.3 Advice for firefighters

As in any fire, full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool storage tanks to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat (since tanks are vented this is highly unlikely even without cooling). If possible, firefighters should control run-off water to prevent environmental contamination.

SECTION VI - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing vapors/mists. Avoid contact with skin and eyes. Wear appropriate protective clothing as required. Ensure adequate ventilation.

6.2 Environmental precautions

Should not be released to the environment. Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways. If spilled into a liquid, contain and recover liquid when possible.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal or re-use. Avoid dust formation. If spilled into a liquid, cover drains and attempt to cover liquid with a large quantity of inert absorbent (e.g. sand, vermiculite, kitty litter, dry earth). Do not use combustible materials such as saw dust. Clean contaminated area with water.

6.4 Reference to other sections

For indications about waste treatment, see section 13.

SECTION VII - HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe label precautions. Avoid contact with skin and eyes. Wear all appropriate protective equipment specified in Section 8. Wash thoroughly after handling. Keep containers closed when not in use. Use proper equipment for lifting and transporting all

containers. Ensure adequate ventilation. Avoid ingestion or inhalation. Handle in accordance with good industrial hygiene and safety practices.

Advice on protection against fire and explosion

Material is non-flammable and non-combustible.

7.2 Conditions for safe storage, including any incompatibilities

Keep in cool, dry, indoor, ventilated storage areas protecting it from moisture until ready to be transferred to a delivery tank and then ultimately into a brine tank. Protect against physical damage. Isolate from incompatible substances. Do not store near acids, heat, oxidizable materials or organics.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION VIII - EXPOSURE CONTROLS AND PERSONNEL PROTECTION

8.1 Control parameters

This product does not contain any hazardous materials with occupational exposure limits established by any regulatory body.

8.2 Exposure controls

Engineering Measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. See section 7.1. Ensure eyewash stations and safety showers are close to the workstation location.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices.

Eye/face protection: Wear appropriate protective eyeglasses or chemical safety goggles as prescribed in 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Skin and Body Protection: Wear protective gloves and clothing to prevent skin exposure. Gloves must be inspected prior to use. Gloves should be impermeable to chemicals and oil.

Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation experienced, ventilation or evacuation may be required. If a respirator is used, follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN149.

Environmental exposure controls: Do not empty into drains.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical State	Solid (Liquid in a Brine Tank)
Appearance	White, Crystalline, Granular substance
Odor	Odorless
Odor Threshold	No data available
Molecular Weight	58.4 (sodium chloride)
Chemical Formula	NaCl (sodium chloride)
pH	5.0 – 8.0 @20°C (5% aqueous solution)
Freezing Point	-38.0° F (-21.1° C) (For a 23.3% saturated brine solution)
Melting Point	1473.8° F (801° C)
Boiling Point	2661.8° F (1461° C)
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Flash Point	No data available
Autoignition Temperature	No data available

Decomposition Temperature	No data available
Lower Explosive Limit (LEL)	No data available
Upper Explosive Limit (UEL)	No data available
Vapor Pressure	1 mm Hg @865° C
Vapor Density	Not applicable
Relative Density	No data available
Viscosity	Not applicable
Solubility in Water	Soluble in water (reaches saturation at 23.3% by weight salt solution)

9.2 Other data - No data available

SECTION X - STABILITY AND REACTIVITY

10.1 Reactivity

None known based on information available.

10.2 Chemical stability

Stable under normal storage conditions. Material is hygroscopic.

10.3 Possibility of hazardous reactions

None under normal storage conditions.

10.4 Conditions to avoid

Incompatible products. Excess heat. Avoid dust formation. Avoid exposure to moist air or water while in storage prior to be put in a brine tank.

10.5 Incompatible materials

Strong oxidizing agents, metals, strong acids.

10.6 Hazardous decomposition products

Hydrogen chloride gas and sodium oxides. Decomposition rate increases with temperature.

SECTION XI - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Oral Toxicity (Sodium Chloride)

LD₅₀ (Oral) - 3 g/kg (rat)

LD₅₀ (Dermal) - 10 g/kg (rabbit)

LC₅₀ (Inhalation) – 42 g/m³ (Rat) for one hour

Acute inhalation toxicity

May cause severe bronchial irritation.

Acute dermal toxicity

May cause redness, mild pain, blistering and itchy eczema. Sensitization reactions are possible in previously exposed persons.

Skin irritation

No information available

Eye irritation

No information available

Sensitization

May cause allergic skin reaction

Genotoxicity in vitro

No data available

Mutagenicity

No test data available.

Aspiration hazard

No test data available. Risk of damage to lungs if prolonged exposure.

Specific organ toxicity - single exposure

No data available

Specific organ toxicity - repeated exposure

May cause allergic skin reactions, dermatitis (allergic and contact) and asthma or bronchitis. Sensitization reactions are reported in individuals.

Additional information

RTECS: Not available

11.2 Further information

Ingestion: May cause irritation and erosion of the mucous membranes, vomiting and abdominal pain and spasms. May have adverse reaction in diabetics in particular. See a doctor if a problem develops.

Further data: Handle in accordance with good industrial hygiene and safety practice.

Chronic Effects

Persons with impaired respiratory function may be more susceptible to the effects of this substance.

None of the components of this product are listed as carcinogens by ACGIH, IARC, NTP or OSHA.

SECTION XII - ECOLOGICAL INFORMATION**12.1 Toxicity Aquatic Ecotoxicity:**

This product is toxic to freshwater aquatic organisms.

Aquatic Ecotoxicity:

Acute and prolonged toxicity to fish: LC₅₀ – Pimephales promelas (Fathead minnow) 96 h: 6,700 - 7,650 mg/L
LC₅₀ – Oncorhynchus mykiss (Cutthroat trout) 96 h: 4,747 – 7,824 mg/L
LC₅₀ – Lepomis Macrochirus (Blue Gill) 96 h: 6,080 – 12,946 mg/L

Acute toxicity to aquatic invertebrates: EC₅₀ – Daphnia magna (Water flea), 48 h: 1,000 mg/L

12.2 Persistence and degradability**Biodegradability**

Soluble in water. Persistence is unlikely based on information available.

12.3 Bioaccumulation potential

Partition coefficient, n-octanol in water: Data not available

Bioaccumulation is not expected

12.4 Mobility in soil

Product is mobile in water due to its water solubility but not if spilled on ground unless mixed with water.

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment is not available as chemical safety assessment was not conducted.

12.6 Other adverse effects**Additional ecological information**

This material is a toxic to freshwater aquatic life. Do not allow material to run into surface waters, wastewater or soil.

SECTION XIII - DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

The generation of waste should be avoided or minimized whenever possible. This material is subject to disposal regulations under U.S. EPA 40 CFR Parts 261 and 262. Dispose of in accordance with the Directive 2008/98/EC as well as other national, federal, state/provincial and local laws and regulations.

SECTION XIV - TRANSPORT INFORMATION

US DOT (Domestic Ground Transportation)

Proper Shipping Name: Sodium Chloride
Hazard Class: Not Regulated
Packing Group: Not Regulated
NAERG: Not Regulated
Packaging Authorizations: Not Regulated
Packaging Exceptions: Not Regulated

IMO/IMDG (Water Transportation)

Proper Shipping Name: Sodium Chloride
Hazard Class: Not Regulated
UN/NA#: Not Regulated
Packing Group: Not Regulated
Marine Pollutant: Not Regulated
EMS Number: Not Regulated

ICAO/IATA (Air Transportation)

Proper Shipping Name: Sodium Chloride
Hazard Class: Not Regulated
UN/NA#: Not Regulated
Packing Group: Not Regulated
Quantity Limitations: Not Regulated

RID/ADR (Rail Transportation)

Proper Shipping Name: Sodium Chloride
Hazard Class: Not Regulated
UN/NA#: Not Regulated
Packing Group: Not Regulated

SECTION XV - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material contains no "Hazardous Chemicals" as defined by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

OSHA PSM: Not regulated under OSHA Process Safety Management Standard (PSM) 29 CFR 1910.119

EPA RMP: Not regulated under EPA Risk Management Standard (RMP) 40 CFR Part 68

EPA FIFRA: Not regulated as a Pesticide under the Federal insecticide, Fungicide and Rodenticide Act (FIFRA) 40 CFR Part 150

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product not subject to TSCA 12(b) Export Notification.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: This product is not subject to the reporting requirements of Section 311/312 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 313 Information: None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains no elements that fall under the CERCLA reportable substances. There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Clean Air Act (CAA)

This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain any Class 1 Ozone depleters.

This product does not contain any Class 2 Ozone depleters.

Clean Water Act (CWA)

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

Other U.S. State Inventories:

This product does not contain any material that is on any Hazardous Substance Inventories and/or Right-to-Know lists for any state in the United States.

Canada

WHMIS Hazard Symbol and Classification:



Class E – Skin Irritant

Canadian Controlled Products Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the SDS contains all the information required by the Controlled Products Regulations.

Canadian Ingredient Disclosure List (IDL): None of the ingredients in this product are listed on the IDL.

Canadian National Pollutant Release Inventory (NPRI): None of the ingredients in this product are listed on the NPRI.

International

Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
United States	Toxic Substance Control Act (TSCA)	Yes
Canada	Domestic Substance List (DSL)	Yes
Canada	Non-Domestic Substance List (NDSL)	Yes
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*"Yes" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.

*"No" indicates that one or more components of this product are not on the inventory and are not exempt from listing.

SECTION XVI - OTHER INFORMATION

Hazardous Material Information System (HMIS)

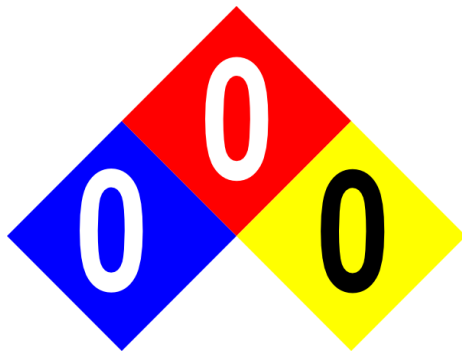
HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	F

HMIS / NFPA Hazard Rating Legend

* = Chronic Health Hazard 2 = MODERATE
0 = INSIGNIFICANT 3 = HIGH
1 = SLIGHT 4 = EXTREME



National Fire Protection Association (NFPA)



- Health Hazards: 0
- Flammability: 0
- Instability: 0
- Special Hazard: None

For additional information, contact our technical service department.

Information contained in this SDS refers only to the specific material designated and does not relate to any process or use involving other materials. This information is based on data believed to be reliable, and the Product is intended to be used in a manner that is customary and reasonably foreseeable. Since actual use and handling are beyond our control, no warranty, express or implied, is made and no liability is assumed by Odyssey Manufacturing in connection with the use of this information.