

# SAFETY DATA SHEET

Classified in accordance with Health Canada Hazardous Products Regulations (SOR/2015-17)

## 1. Identification

**Product identifier:** Brine Solution**Other means of identification****Common name(s),** Salt water, Brine recycle stream, Sodium chloride solution**synonym(s):****SDS number:** NOVA-0087**Recommended use and restriction on use****Recommended use:** Operation of underground storage caverns and for salt manufacturing.**Restrictions on use:** All uses other than the identified.**Manufacturer/Importer/Supplier/Distributor Information****Manufacturer**

Company Name: NOVA Chemicals  
Address: 785 Petrolia Line  
Corunna, Ontario, Canada N0N 1G0  
Telephone: Product Information: 1-412-490-4063  
SDS Information Email: [msdsemail@novachem.com](mailto:msdsemail@novachem.com)

**Emergency telephone number:**

1-800-561-6682, 1-403-314-8767 (NOVA Chemicals) (24 hours)

**General Comments**This is **not** a NOVA Chemicals' product.

## 2. Hazard(s) identification

**Hazard Classification According to Hazardous Products Regulations****Health Hazards**

Serious Eye Damage/Eye Irritation Category 2A

**Label Elements****Hazard Symbol:****Signal Word:** Warning**Hazard Statement:** Causes serious eye irritation.**Precautionary Statements:****Prevention:** Wash hands thoroughly after handling. Wear eye protection/face protection.**Response:** 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.

**Storage:** Store locked up.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium chloride	Salt	7647-14-5	5 - 26%

\* All concentrations are percent by weight.

**Additional Information:** This product is considered hazardous by the Hazardous Products Regulations, 2015.

### 4. First-aid measures

**Inhalation:** Call a POISON CENTRE/doctor if you feel unwell.

**Ingestion:** Call a POISON CENTRE/doctor if you feel unwell.

**Skin Contact:** If skin irritation occurs: Get medical advice/attention.

**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.

#### Most important symptoms/effects, acute and delayed

**Symptoms:** Eye irritation.

#### Indication of immediate medical attention and special treatment needed

**Treatment:** For more detailed medical emergency support information, call 1-800-561-6682 or 1-403-314-8767 (24 hours, NOVA Chemicals Emergency Response). Treat symptomatically. Treatment for overexposure should be directed at controlling the symptoms and clinical condition of the patient. After adequate first aid, no further treatment is required unless symptoms reappear.

### 5. Fire-fighting measures

**General Fire Hazards:** This product is not flammable. Product does not burn.

#### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** In case of fire in the surroundings: use appropriate extinguishing media.

**Unsuitable extinguishing media:** not applicable

**Specific hazards arising from the chemical:** None. This product is not flammable.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** None.

**Special protective equipment for firefighters:** Firefighters should wear personal protective equipment suitable for the fire conditions and the materials burning.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up:** Wear appropriate personal protective equipment. Do not touch or walk through spilled material. Keep upwind. Keep out of low areas. Stop leak if safe to do so. Contain discharge by booming on water or diking on ground. Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

Small Spills: Remove liquid material with approved pumps or vacuum equipment.

Large Spills: Isolate, contain, and attempt to recover. Remove liquid material with approved pumps or vacuum equipment. Spill area may be washed down with water, with wash waters collected for testing and proper disposal.

**7. Handling and storage**

**Precautions for safe handling:** Product is slowly corrosive to metal. Handle in properly designed and approved equipment systems. Periodically inspect pipelines and other equipment for integrity and corrosion. Do not ingest or inhale. Avoid contact with skin and eyes. Wash hands thoroughly after handling. Wear eye protection/face protection.

**Conditions for safe storage, including any incompatibilities:** Storage area should be clearly identified, well-illuminated and clear of obstruction. Store locked up. Only allow access to authorized persons. Storage ponds and tank areas should be periodically inspected and kept separate from fresh water supply or outlets. Keep away from incompatible materials.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

None of the components have assigned exposure limits.

**Appropriate Engineering Controls**

Provide adequate ventilation to maintain worker exposure below levels that are irritating to the eyes. Administrative (procedure) controls and use of personal protective equipment may also be required.

**Individual protection measures, such as personal protective equipment**

**General information:**

Personal protective equipment (PPE) should not be considered a long-term solution to exposure control. Employer programs to properly select, fit, maintain and train employees to use equipment must accompany PPE.

Consult a competent industrial hygiene resource, the PPE manufacturer's recommendation, and/or applicable regulations to determine hazard potential and ensure adequate protection.

<b>Eye/face protection:</b>	Chemical goggles are recommended. If splashing is possible use chemical goggles and a full-face shield. Carefully rinse off contaminated goggles before removing.
<b>Skin Protection</b>	
<b>Hand Protection:</b>	Chemical resistant gloves.
<b>Skin and Body Protection:</b>	Wear chemical-resistant safety footwear with good traction to prevent slipping. Wear work clothes with long sleeves and pants. If splashing or contact with liquid material is possible, consider the need for an impervious overcoat.
<b>Respiratory Protection:</b>	None under normal conditions.
<b>Hygiene measures:</b>	Ensure that eyewash stations and safety showers are in close proximity to work locations.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Colour:</b>	White/clear
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	No data available.
<b>pH:</b>	6.5 - 8.5
<b>Melting point/freezing point:</b>	-10 °C (14 °F)
<b>Initial boiling point and boiling range:</b>	> 100 °C (> 212 °F)
<b>Flash Point:</b>	not applicable
<b>Evaporation rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	not applicable
<b>Upper/lower limit on flammability or explosive limits</b>	
<b>Flammability limit - upper (%):</b>	not applicable
<b>Flammability limit - lower(%):</b>	not applicable
<b>Vapour pressure:</b>	not applicable
<b>Vapour density:</b>	not applicable
<b>Density:</b>	1,200 kg/m <sup>3</sup>
<b>Relative density:</b>	1.2 (15 °C (59 °F))
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Miscible with water.
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	not applicable
<b>Decomposition temperature:</b>	not applicable
<b>Viscosity:</b>	No data available.

## 10. Stability and reactivity

<b>Reactivity:</b>	Product is slowly corrosive to metal.
<b>Chemical Stability:</b>	Material is stable under normal conditions.

<b>Possibility of Hazardous Reactions:</b>	None known.
<b>Conditions to Avoid:</b>	None known.
<b>Incompatible Materials:</b>	In presence of air, liquid contact or mists will slowly corrode most metals.
<b>Hazardous Decomposition Products:</b>	None known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	May be irritating to the respiratory tract.
<b>Ingestion:</b>	Ingestion of large quantities of this product may cause irritation of the gastrointestinal tract.
<b>Skin Contact:</b>	Skin contact may lead to skin dryness; mild skin irritant.
<b>Eye contact:</b>	Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	Coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.
<b>Ingestion:</b>	If very large quantities ingested - nausea, vomiting, dehydration, diarrhoea, oedema.
<b>Skin Contact:</b>	Dry skin.
<b>Eye contact:</b>	Eye irritation.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

<b>Oral Product:</b>	Not classified for acute toxicity based on available data.
<b>Dermal Product:</b>	Not classified for acute toxicity based on available data.
<b>Inhalation Product:</b>	Not classified for acute toxicity based on available data.

**Repeated dose toxicity Product:** No data available.

**Skin Corrosion/Irritation Product:** No data available.

**Components:**  
Sodium chloride Mild.

**Serious Eye Damage/Eye Irritation Product:** Causes serious eye irritation.

**Respiratory or Skin Sensitization****Product:** No data available.**Carcinogenicity****Product:** No data available.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**ACGIH Carcinogen List:**

No carcinogenic components identified

**Germ Cell Mutagenicity****In vitro****Product:** No data available.**In vivo****Product:** No data available.**Reproductive toxicity****Product:** No data available.**Specific Target Organ Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** No data available.**Other effects:**

No data available.

**12. Ecological information****Ecotoxicity:****Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Components:**

Sodium chloride LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 4,747 - 7,824 mg/l Mortality

**Aquatic Invertebrates****Product:** No data available.**Components:**

Sodium chloride EC 50 (Water flea (Daphnia magna), 48 h): 340.7 - 469.2 mg/l Intoxication

**Toxicity to aquatic plants****Product:** No data available.

**Chronic hazards to the aquatic environment:**
**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to aquatic plants**

**Product:** No data available.

**Persistence and Degradability**
**Biodegradation**

**Product:** No data available.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative Potential**
**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Mobility in Soil:**

When spilled onto soil, brine will behave similar to spilled water. Sodium chloride may leach from soil into groundwater.

**Other Adverse Effects:**

A concentrated brine solution (~26% sodium chloride) will dehydrate animal and vegetative species.

**13. Disposal considerations**
**Disposal instructions:**

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. The use, mixing or processing of this product with other materials may alter its properties or hazards.

**Contaminated Packaging:**

Check local, federal and provincial environmental regulations prior to disposal.

**14. Transport information**
**TDG**

Not regulated.

**15. Regulatory information**
**Canada Federal Regulations**
**List of Toxic Substances (CEPA, Schedule 1)**

Not regulated

**Export Control List (CEPA 1999, Schedule 3)**

Not regulated

**National Pollutant Release Inventory (NPRI)**

**Canada. Canadian Environmental Protection Act (CEPA). National Pollutant Release Inventory (NPRI) (Parts 1-4)**  
NPRI Not regulated

**Canada. National Pollutant Release Inventory (NPRI) Substances, Part 5, VOCs with Additional Reporting Requirements**  
NPRI PT5 Not regulated

**Greenhouse Gases**  
Not regulated

**Precursor Control Regulations**  
Not regulated

**Canada. Substances Subject to Significant New Activity (SNAC) Reporting Requirements**  
Not regulated

**Inventory status**

Canada DSL Inventory List: On or in compliance with the inventory

US TSCA Inventory: On or in compliance with the inventory

**16. Other information, including date of preparation or last revision**

**Issue Date:** 03/06/2020

**Revision Information:** 03/06/2020: SDS Update

**Version #:** 7.0

**Abbreviations and acronyms:** ACGIH = American Conference of Governmental Industrial Hygienists; BOD = Biochemical Oxygen Demand; CAS = Chemical Abstracts Service; CEPA = Canadian Environmental Protection Act; COD = Chemical Oxygen Demand; DSL = Domestic Substances List; EC50 = Effective Concentration 50%; EPA = Environmental Protection Agency; GHS = Globally Harmonized System for the Classification and Labelling of Chemicals; IARC = International Agency for Research on Cancer; IDLH = Immediately Dangerous to Life or Health; Kow = Octanol/water partition coefficient; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; LEL = Lower Explosive Limit; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OEL = Occupational Exposure Limit; OSHA = Occupational Safety and Health Administration; PNOC = Particulates Not Otherwise Classified; PPE = Personal Protective Equipment; REL = Recommended Exposure Limit; SCBA = Self Contained Breathing Apparatus; SDS = Safety Data Sheet; STEL = Short Term Exposure Limit; TDG = Transportation of Dangerous Goods; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = Time Weighted Average

**Further Information:** No data available.

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