

SAFETY DATA SHEET



Revision date: 06-Sep-2022

Revision Number 6

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier

Product Name SODIUM CHLORITE SOLUTIONS 25%-31%

Product Code(s) 000000017559

Other means of identification

UN number 1908

Recommended use of the chemical and restrictions on use

Recommended use Sanitiser; biocide; fungicide; sporicide.

Uses advised against No information available

Supplier

Ixom Operations Pty Ltd
ABN: 51 600 546 512
Level 8, 1 Nicholson Street
Melbourne 3000
Australia

Telephone Number: +61 3 9906 3000

Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

| | |
|---|---------------------------|
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Dermal | Category 3 |
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |
| Specific target organ toxicity (repeated exposure) | Category 2 |

SIGNAL WORD

Danger

Label elements

Corrosion
Skull and crossbones
Health hazard

**Hazard statements**

H302 - Harmful if swallowed
H311 - Toxic in contact with skin
H314 - Causes severe skin burns and eye damage
H373 - May cause damage to organs through prolonged or repeated exposure

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:
H400 - Very toxic to aquatic life

Precautionary Statements - Prevention

Do not breathe fume, gas, mist, vapours, spray
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves / protective clothing / eye protection / face protection

Precautionary Statements - Response

Get medical advice/attention if you feel unwell
Specific treatment (see First aid on this SDS)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN: Wash with plenty of water and soap
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
Call a POISON CENTER or doctor/physician if you feel unwell
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.
Collect spillage

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable

Other hazards which do not result in classification

AUH032 - Contact with acids liberates very toxic gas

General Hazards

Poisons Schedule (SUSMP) 5

3. COMPOSITION/INFORMATION ON INGREDIENTS**Mixture**

| Chemical name | CAS No. | Weight-% |
|----------------------------|-----------|----------|
| Sodium chlorite | 7758-19-2 | 25-31 |
| Non hazardous component(s) | - | to 100 |

4. FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|--|
| General advice | For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance. |
| Inhalation | Remove to fresh air. Call a physician if symptoms occur. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Symptoms | Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning. |
|-----------------|--|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|---|
| Note to physicians | Treat symptomatically. Can cause corneal burns. |
|---------------------------|---|

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media

| | |
|-------------------------------------|--|
| Suitable Extinguishing Media | Dry chemical, CO ₂ , water spray or regular foam. |
|-------------------------------------|--|

| | |
|---------------------------------------|---------------------------|
| Unsuitable extinguishing media | No information available. |
|---------------------------------------|---------------------------|

Specific hazards arising from the chemical

| | |
|---|---|
| Specific hazards arising from the chemical | Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Non-combustible. |
|---|---|

Special protective actions for fire-fighters

| | |
|---|--|
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |
|---|--|

| | |
|---------------------|----|
| Hazchem code | 2X |
|---------------------|----|

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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|-----------------------------|---|
| Personal precautions | Attention! Corrosive material. Avoid contact with skin and eyes. Do not breathe vapor or mist. Evacuate personnel to safe areas. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling. |
|-----------------------------|---|

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes. Do not breathe vapor or mist. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Use personal protection equipment. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Do not allow to dry out. Store away from foodstuffs. Keep container closed when not in use.

This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.

Incompatible materials Acids. Bases. Chlorine. Hypochlorites. Organic solvents. Finely powdered metals. Phosphorus. Reducing agents. Sulfur. Sulfites.

Poisons Schedule (SUSMP) 5

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for decomposition product(s):

Chlorine: Peak Limitation = 3 mg/m³ (1 ppm)

Chlorine dioxide: 8hr TWA = 0.28 mg/m³ (0.1 ppm), 15 min STEL = 0.83 mg/m³ (0.3 ppm)

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

Peak Limitation - a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

STEL (Short Term Exposure Limit) - the airborne concentration of a particular substance calculated as a time-weighted average over 15 minutes, which should not be exceeded at any time during a normal eight hour work day. According to current knowledge

this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

Engineering controls

Ensure that eyewash stations and safety showers are close to the workstation location. Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Eye/face protection

Tight sealing safety goggles. If splashes are likely to occur: Face protection shield.

Skin and body protection

Boots. Apron. Wear suitable protective clothing. Overalls.

Hand protection

Elbow-length impervious gloves.

Respiratory protection

If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

Environmental exposure controls

No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | |
|----------------|--------------------------|
| Physical state | Liquid |
| Appearance | Clear |
| Color | Pale Yellow |
| Odor | Faint Chlorine -like |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------|-------------------|-------------------------|
| pH | >12 | None known |
| pH (as aqueous solution) | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | 100°C | None known |
| Flash point | Not applicable | None known |
| Evaporation rate | No data available | None known |

| | | |
|---|-------------------------------------|------------|
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | Not applicable | |
| Lower flammability or explosive limits | Not applicable | |
| Vapor pressure | 23.7 mmHg @25°C | None known |
| Vapor density | 0.02 kg/m ³ | None known |
| Relative density | 1.1-1.3 @25°C | None known |
| Water solubility | Miscible in water | None known |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | Not applicable | None known |
| Decomposition temperature | 180-200°C (for dry sodium chlorite) | None known |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |

Other information**10. STABILITY AND REACTIVITY**Reactivity

Reactivity Contact with acids liberates very toxic gas.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.

Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions Contact with acids liberates very toxic gas.

Conditions to avoid

Conditions to avoid Do not allow evaporation to dryness. Direct sunlight. Avoid contamination of the material.

Incompatible materials

Incompatible materials Acids. Bases. Chlorine. Hypochlorites. Organic solvents. Finely powdered metals. Phosphorus. Reducing agents. Sulfur. Sulfites.

Hazardous decomposition products

Hazardous decomposition products Chlorine. Chlorine dioxide. Sodium oxides.

11. TOXICOLOGICAL INFORMATIONAcute toxicityInformation on likely routes of exposure

Product Information No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

| | |
|---------------------|--|
| Inhalation | May cause irritation. |
| Eye contact | Causes serious eye damage. |
| Skin contact | Contact causes severe skin irritation and possible burns. Toxic in contact with skin. |
| Ingestion | Can burn mouth, throat, and stomach. |
| Symptoms | Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning. |

Numerical measures of toxicity - Product Information

Refer to component information below.

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-----------------|---------------------|-------------|-------------------------------------|
| Sodium chlorite | = 165 mg/kg (Rat) | - | = 230 mg/m ³ (Rat) 4 h |

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|---|
| Skin corrosion/irritation | Causes burns. Classification is based on mixture calculation methods based on component data. |
| Serious eye damage/eye irritation | Causes serious eye damage. Classification is based on mixture calculation methods based on component data. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | No information available. |
| Carcinogenicity | Refer to 'Chronic effects' section below. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | May cause damage to organs through prolonged or repeated exposure. Classification is based on mixture calculation methods based on component data. |
| Aspiration hazard | No information available. |
| Chronic effects: | Sodium chlorite has been classified by the International Agency for Research on Cancer (IARC) as a Group 3 agent. Group3 - The agent is not classifiable as to its carcinogenicity to humans. |

12. ECOLOGICAL INFORMATION**Ecotoxicity****Ecotoxicity** Keep out of waterways. Very toxic to aquatic life.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|-----------------|----------------------|---------------------|----------------------------|------------------------|
| Sodium chlorite | - | LC50: 100 - 500mg/L | - | EC50: =0.026mg/L (48h, |

| | | | | |
|--|--|--|--|--|
| | | (96h, Brachydanio rerio) LC50: >100mg/L (96h, Lepomis macrochirus) LC50: >100mg/L (96h, Oncorhynchus mykiss) | | Daphnia magna) EC50: 0.25 - 0.33mg/L (48h, Daphnia magna) EC50: 0.012 - 0.018mg/L (48h, Daphnia magna) |
|--|--|--|--|--|

Persistence and degradability

Persistence and degradability Biodegradable.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Other adverse effects**13. DISPOSAL CONSIDERATIONS****Waste treatment methods**

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION**ADG**

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number 1908
Proper shipping name CHLORITE SOLUTION
Hazard class 8
Packing group II
Hazchem code 2X

IATA

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number 1908
UN proper shipping name CHLORITE SOLUTION
Transport hazard class(es) 8
Packing group II

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number 1908
UN proper shipping name CHLORITE SOLUTION
Transport hazard class(es) 8
Packing group II

IMDG EMS Fire
IMDG EMS SpillF-A
S-B

15. REGULATORY INFORMATION

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

National regulations

Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Poisons Schedule (SUSMP) 5

International Inventories

AiIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

NZIoC

All the constituents of this material are listed on the New Zealand Inventory of Chemicals.

Legend:

AiIC- Australian Inventory of Industrial Chemicals

NZIoC - New Zealand Inventory of Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Issuing Date: 06-Sep-2022

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |
| C | Carcinogen | | |

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGl(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australian Industrial Chemicals Introduction Scheme (AICIS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
RTECS (Registry of Toxic Effects of Chemical Substances)
World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

End of Safety Data Sheet