

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

| | |
|--------------|-----------------------------|
| Product name | Sodium Chromate 5% Solution |
| CAS number | 10034-82-9 |
| Synonyms | N/A |

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

| | |
|-----------------|-----------------------|
| Identified uses | Laboratory chemicals. |
|-----------------|-----------------------|

1.3 Details of the supplier of the safety data sheet

| | |
|-----------|--|
| Company | Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A. |
| Telephone | 512-668-9918 |
| Fax | 512-886-4008 |

1.4 Emergency telephone

| | | |
|--------------------------|------------------------------|----------|
| Emergency Phone # | US & Canada: 1-800-535-5053 | INFOTRAC |
| | International 1-352-323-3500 | INFOTRAC |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

| | |
|-----------------------------------|-------------|
| Acute Oral Toxicity | Category 4 |
| Acute Dermal Toxicity | Category 4 |
| Acute Inhalation Toxicity | Category 4 |
| Skin Corrosion/Irritation | Category 1C |
| Serious Eye Damage/Eye Irritation | Category 1 |
| Respiratory Sensitization | Category 1 |

| | |
|--|-------------|
| Skin Sensitization | Category 1 |
| Germ Cell Mutagenicity | Category 1B |
| Carcinogenicity | Category 1B |
| Reproductive Toxicity | Category 1B |
| Specific Target Organ Toxicity (repeated exposure) | Category 1 |

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

Harmful if swallowed.
 Harmful in contact with skin.
 Harmful if inhaled.
 Causes severe skin burns and eye damage.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause an allergic skin reaction.
 May cause genetic defects.
 May cause cancer.
 May damage fertility. May damage the unborn child.
 Causes damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves. Use only outdoors or in a well-ventilated area.

Response: Immediately call a POISON CENTER or doctor/physician.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation or rash occurs, get medical advice/attention. Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Disposal: Dispose of contents/container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Very toxic to aquatic life with long lasting effects.

WARNING: Cancer and Reproductive Harm - <https://www.p65warnings.ca.gov/>.

SECTION 3: Composition/information on ingredients

3.1 Components

| Chemical name | Common name and synonyms | CAS number | Concentration |
|------------------------------|--|------------|---------------|
| Water | Aqua; H ₂ O | 7732-18-5 | 95% |
| Sodium chromate tetrahydrate | Disodium chromate tetrahydrate; Chromic acid disodium salt tetrahydrate | 10034-82-9 | 5% |

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Remove to fresh air. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. If not breathing, give artificial respiration.

In case of skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

In case of eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

If swallowed Do NOT induce vomiting. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Hazardous Combustion Products: Sodium oxides. Chromium oxide.

5.3 Special protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2 | 0 | 0 | N/A |

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes, and clothing.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. Should not be released into the environment.

6.3 Methods and materials for containment and cleaning up

Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Clean contaminated surface thoroughly.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Wear personal protective equipment. Avoid contact with skin, eyes, and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. Provide sufficient air exchange and/or exhaust in work rooms. Use only in area provided with appropriate exhaust ventilation. Keep away from incompatible materials.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatibilities

Combustible materials. Organic materials. Reducing agents.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

| Component | Type | Value |
|------------------------------|-------------------|-----------|
| Sodium chromate tetrahydrate | (Vacated) Ceiling | 0.1 mg/m3 |
| | Ceiling | 0.1 mg/m3 |

US. ACGIH Threshold Limit Values

| Component | Type | Value |
|------------------------------|------|--------------|
| Sodium chromate tetrahydrate | TWA | 0.0002 mg/m3 |
| | STEL | 0.0005 mg/m3 |

US. NIOSH: Pocket Guide to Chemical Hazards

| Component | Type | Value |
|------------------------------|------|--------------|
| Sodium chromate tetrahydrate | IDLH | 15 mg/m3 |
| | TWA | 0.0002 mg/m3 |

Biological occupational exposure limits

No information available.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Personal protective equipment

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Body Protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection

Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical State | Liquid |
| Appearance | Yellow |
| Odor | Odorless |
| Odor Threshold | No information available |
| pH | No information available |
| Melting Point/Range | No information available |
| Boiling Point/Range | No information available |
| Evaporation Rate | No information available |
| Flammability (solid) | Not applicable |
| Flammability or explosive limit | No data available |
| Upper | |
| Lower | |
| Vapor Pressure | No information available |
| Vapor Density | No information available |
| Density | 1.06-1.1 |
| Solubility | Soluble |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temp | No information available |
| Decomposition Temp | No information available |
| Viscosity | No information available |
| Molecular Formula | Na ₂ CrO ₄ ·4H ₂ O |
| Molecular Weight | 234.04 g/mol |
| VOC Content(%) | No information available |
| Oxidizing properties | No information available |

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Slightly reactive with combustible materials, organic materials.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Incompatible materials.

10.5 Incompatible materials

Combustible materials, Organic materials, Reducing agents.

10.6 Hazardous decomposition products

Sodium oxides, Chromium oxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------------|-----------------|---------------------|--------------------|
| Sodium chromate (anhydrous) | 136 mg/kg (Rat) | 1330 mg/kg (Rabbit) | 104 mg/m3 (Rat) 4h |

Skin corrosion/irritation

Causes burns by all exposure routes.

Serious eye damage/eye irritation

Causes burns by all exposure routes.

Respiratory or skin sensitization

May cause sensitization by skin contact.

Germ cell mutagenicity

Mutagenic.

Carcinogenicity

| Component | CAS | IARC | NTP | ACGIH | OSHA | Mexico |
|------------------------------|------------|------------|------------|------------|------------|------------|
| Sodium chromate tetrahydrate | 10034-82-9 | Not listed | Known | A1 | Not listed | A1 |
| Water | 7732-18-5 | Not listed | Not listed | Not listed | Not listed | Not listed |

Specific target organ toxicity - single exposure

No information available.

Specific target organ toxicity - repeated exposure

Skin. Eyes. Kidneys. Liver. Blood. Respiratory system.

Reproductive toxicity

May impair fertility. May cause harm to the unborn child. Teratogenic effects have occurred in experimental animals.

Chronic effects

Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue, and danger of perforation. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

11.2 Additional Information

The toxicological properties have not been fully investigated.

SECTION 12: Ecological information

12.1 Toxicity

Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment. Do not allow material to contaminate ground water system.

| Product | | Species | Test Results |
|--------------------------------|------|---------------------|---------------------------------|
| Sodium chromate (anhydrous) | LC50 | Lepomis macrochirus | 118 mg/L, 96h static |
| | LC50 | Pimephales promelas | 3 mg/L, 96h |
| | EC50 | Daphnia magna | 0.0183 - 0.023 mg/L, 48h static |

12.2 Persistence and degradability

May persist based on information available.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Will likely be mobile in the environment due to its water solubility

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

| | |
|----------------------|---------------------------|
| UN-no | UN1760 |
| Proper Shipping Name | Corrosive liquids, n.o.s. |
| Hazard Class | 8 |
| Packing Group | III |

IMDG

| | |
|----------------------|---------------------------|
| UN-no | UN1760 |
| Proper Shipping Name | Corrosive liquids, n.o.s. |
| Hazard Class | 8 |
| Packing Group | III |

IATA

| | |
|----------------------|---------------------------|
| UN-no | UN1760 |
| Proper Shipping Name | Corrosive liquids, n.o.s. |
| Hazard Class | 8 |
| Packing Group | III |

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9), Section 6.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9).

Superfund Amendments and Reauthorization Act of 1986 (SARA)**SARA 302 Extremely hazardous substance**

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9).

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9).

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA)

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9).

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Not listed.

US. New Jersey Worker and Community Right-to-Know Act

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9)

California Proposition 65

Listed, Sodium chromate tetrahydrate (CAS #10034-82-9)

SECTION 16: Other information

Issue date: 02/14/2025

SECTION 17: 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.