

# Material Safety Data Sheet

## Sodium sulfite

### SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Sodium sulfite

**Catalog Codes:** SLS2383

**CAS#:** 7757-83-7

**TSCA:** TSCA 8(b) inventory: Sodium sulfite

**Synonym:** Sulfurous Acid. Disodium salt Chemical Name: Sulfurous acid, disodium salt

**Chemical Formula:** Na<sub>2</sub>SO<sub>3</sub>

**Company information:** Choice Chemicals Ltd.

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### SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

**Composition:**

Name	CAS#	% by Weight
Sodium sulfite	7757-83-7	100

**Toxicological Data on Ingredients:** Sodium sulfite: **ORAL (LD50):** Acute: **820** mg/kg [Mouse.]. **3650** mg/kg [Rat].

### SECTION 3: HAZARDS IDENTIFICATION

**Potential Acute Health Effects:**

Hazardous in case of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant), of eye contact (irritant).

**Potential Chronic Health Effects:**

Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to peripheral nervous system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

## SECTION 4: FIRST AID MEASURES

Eye Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

**Skin Contact:**

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

**Serious Skin Contact:** Not available.

**Inhalation:**

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.

## SECTION 5: FIRE AND EXPLOSION DATA

**Flammability of the Product:** Non-flammable.

**Auto-Ignition Temperature:** Not applicable.

**Flash Points:** Not applicable.

**Flammable Limits:** Not applicable.

**Products of Combustion:** Not available.

**Fire Hazards in Presence of Various Substances:** Not applicable.

**Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions:** Not applicable.

**Special Remarks on Fire Hazards:** Not available.

**Special Remarks on Explosion Hazards:** Not available.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Small Spill:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill:**

Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

## SECTION 7: HANDLING AND STORAGE

**Precautions:**

Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, combustible materials, organic materials, acids.

**Storage:**

Air sensitive. Moisture sensitive. Keep container tightly closed. Keep container in a cool, well-ventilated area.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection:** Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Physical state and appearance:

Solid. (Solid crystalline powder. Powdered solid. Crystals solid.)

Odor: Sulfurous. Odorless.

Taste: Sulfurous. Saline.

**Molecular Weight:** 126.04 g/mole **Color:** White or Tan to slightly pink **pH (1% soln/water):** Not available.

**Boiling Point:** Not available.

**Melting Point:** Decomposition temperature: >500C (932<sup>s</sup>)

**Critical Temperature:** Not available.

**Specific Gravity:** 2.63 (Water = 1)

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not available.

**Volatility:** Not available.

**Odor Threshold:** Not available.

**Water/Oil Dist. Coeff.:** Not available, **tonicity (in Water):** Not available.

**Dispersion Properties:** See solubility in water.

### Solubility:

Soluble in cold water, hot water. Soluble in glycerol. Almost insoluble in alcohol.

## SECTION 10: STABILITY AND REACTIVITY DATA

**Stability:** The product is stable.

**Instability Temperature:** Not available.

**Conditions of Instability:** Incompatible materials, air, moisture, dust generation

**Incompatibility with various substances:** Reactive with oxidizing agents, combustible materials, organic materials, acids. **Corrosivity:**

Corrosive in presence of aluminum, of zinc, of copper. Slightly corrosive in presence of steel.

### Special Remarks on Reactivity:

Air sensitive. Moisture sensitive. Keep container tightly closed. When heated to decomposition, it emits toxic fumes of Na<sub>2</sub>O and SO<sub>x</sub>

**Special Remarks on Corrosivity:** Not available.

**Polymerization:** Will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

**Routes of Entry:** Inhalation. Ingestion.

**Toxicity to Animals:** Acute oral toxicity (**LD50**): 820 mg/kg [Mouse.].

**Chronic Effects on Humans:**

CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. May cause damage to the following organs: peripheral nervous system, central nervous system (CNS).

**Other Toxic Effects on Humans:**

Hazardous in case of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant).

**Special Remarks on Toxicity to Animals:**

Lowest Published Dose: LDL [Rabbit] - Route: Oral; Dose 2825 mg/kg

**Special Remarks on Chronic Effects on Humans:** May affect genetic material(mutagenic)

**Special Remarks on other Toxic Effects on Humans:**

Acute Potential Health Effects: Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation and may cause chemical conjunctivitis. Conjunctivitis may be more noted in sensitive individuals. Inhalation: Causes upper respiratory tract and mucous membrane irritation. May cause hypersensitivity reaction with swelling of the tongue, bronchospasm, bronchoconstriction diaphoresis, flushing, urticaria, hypotension, tachycardia, and anaphylaxis particularly in asthmatic people who are sulfite sensitive. Ingestion: May cause gastrointestinal tract irritation with abdominal pain, nausea, vomiting and diarrhea. May affect behavior/central nervous system (CNS depression with convulsions, somnolence), respiration (respiration depression), and cardiovascular system (circulatory disturbances, hypotension). It may liberate sulfurous acid which may result in caustic injury. Hypersensitivity reaction with swelling of the tongue bronchospasm, bronchoconstriction diaphoresis, flushing, urticaria, hypotension, tachycardia, and anaphylaxis may occur more frequently with people who are asthmatic. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause dermal sensitization (contact dermatitis), but this is rare. Inhalation: Prolonged or repeated inhalation may cause chronic irritation, inflammation, delayed pulmonary edema, and alteration of sense of smell and taste. Ingestion: Prolonged or repeated ingestion may affect the bone marrow (bone marrow atrophy), and behavior/central/peripheral nervous systems (CNS depression and paralysis).

## SECTION 12: ECOLOGICAL INFORMATION

**Ecotoxicity:** Not available.

**BOD5 and COD:** Not available.

**Products of Biodegradation:**

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself. **Special**

**Remarks on the Products of Biodegradation:** Not available.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal:**

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## SECTION 14: TRANSPORT INFORMATION

**DOT Classification:** Not a DOT controlled material (United States).

**Identification:** Not applicable.

**Special Provisions for Transport:** Not applicable.

## SECTION 15: OTHER REGULATORY INFORMATION

**Federal and State Regulations:** TSCA 8(b) inventory: Sodium sulfite **Other Regulations:** Not available.

**Other Classifications:**

WHMIS (Canada): Not controlled under WHMIS (Canada).

**DSCL (EEC):**

R22- Harmful if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. S22- Do not breathe dust. S24/25- Avoid contact with skin and eyes. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36- Wear suitable protective clothing.

**HMIS (U.S.A.):**

**Health Hazard:** 2

**Fire Hazard:** 0

**Reactivity:** 0

**Personal Protection:** E

**National Fire Protection Association (U.S.A.):**

**Health:** 1

**Flammability:** 0

**Reactivity:** 0

**Specific hazard:**

**Protective Equipment:**

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

## SECTION 16: OTHER INFORMATION

**References:**

-The Sigma-Aldrich Library of Chemical Safety Data. Edition II. -Hawley. G.G.. The Condensed Chemical Dictionary, 11<sup>th</sup> ed., New York N.Y., Van Nostrand Reinold, 1987. RTECS (Registry of Toxic Effects of Chemicals). Hazardous Substance Data Bank (HDSB)

**Other Special Considerations:** Not available.

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