

SODIUM HYDROGEN SULPHITE, AR GRADE

SECTION 1: PRODUCT IDENTIFICATION

Product Name: SODIUM HYDROGEN SULPHITE

Product Code: 655

CAS#: 7631-90-5

Synonym: Sulfurous acid, monosodium salt; Sulfurous acid, monosodium salt; Sodium hydrogen sulfite; Sodium acid sulfite; Monosodium sulfite; Hydrogen sulfite sodium.

Chemical Formula: NaHSO₃

Molecular Weight: 104.06

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Composition:

Name: Sodium Bisulphite

Toxicological Data on Ingredients: Classification according to Regulation (EC) No 1272/2008:

H302 - Acute toxicity, Oral (Category 4)

H318 - Serious eye damage (Category 1)

SECTION 3: HAZARDS IDENTIFICATION

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects: Slightly hazardous in case of inhalation (lung irritant).

CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC.

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to lungs, skin. 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: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

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. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.



SECTION 5: FIRE FIGHTING MEASURES

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. If necessary: Neutralize the residue with a dilute solution of acetic acid. 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. Neutralize the residue with a dilute solution of acetic acid. 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. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alkalis.
Storage: 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, Gloves. Be sure to use an approved/certified respirator or equivalent.
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: TWA: 5 (mg/m³) from OSHA (PEL) [United States] Inhalation TWA: 5 (mg/m³) from ACGIH (TLV) [United States] Inhalation TWA: 5 (mg/m³) [United States] Inhalation TWA: 5 (mg/m³) [United Kingdom (UK)] Inhalation TWA: 5 (mg/m³) [Canada] Inhalation. Consult local authorities for acceptable exposure limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES



Physical state and appearance Form	: Solid, Crystalline Powder.
Odour	: Sulfurous. (Slight).
Taste	: Not available
Molecular Weight	: 104.06
Colour	: White.
pH	: Not available
Boiling Point	: Not available
Melting Point	: 851°C (1564F)
Critical Temperature	: Not available
Specific Density	: Not Available
Vapor Pressure	: Not Available
Vapor Density	: Not available
Volatility	: Not Available
Odor Threshold	: Not Available
Water/Oil Dist. Coeff.	: Not Available
Ionicity (in Water)	: Not Available
Dispersion Properties	: Not Available
Solubility	: Easily soluble in hot water. Soluble in cold water.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials.

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Slowly oxidized to sulfate on exposure to air.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Ingestion.

Toxicity to Animals:

LD₅₀: Oral – rat – 2000 mg/kg

LC₅₀: Not available.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. May cause damage to the following organs: lungs, skin.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material (mutagenic). May cause cancer based on animal test data. No human data found.

Special Remarks on other Toxic Effects on Humans: Skin: Causes skin irritation. Eyes: Causes eye irritation. Inhalation: Can cause respiratory tract irritation with cough, wheezing, and shortness of breath. It can produce anaphylaxis or other hypersensitivity reactions in some sensitized individuals. Ingestion: May be harmful if swallowed. It may cause nausea, vomiting, diarrhea, abdominal pain, gastric hemorrhage. Extremely large amounts may affect behavior/central nervous system and may produce central nervous system stimulation, irritation, seizures and may also cause, cyanosis, respiratory depression, apnea, circulatory disturbances, hypotension and cardiovascular collapse. May cause asthmatic

reaction in sensitized individuals. Chronic Potential Health Effects: Inhalation: Prolonged or repeated inhalation may cause bronchitis to develop with cough, phlegm, and/or shortness of breath. It can cause an asthma-like allergy or other hypersensitivity reactions such as anaphylaxis, angioedema, bronchoconstriction, flushing, diaphoresis, urticaria, tachycardia, and hypotension in sensitized individuals. Futures exposures may cause shortness of breath, wheezing, cough, and/or chest tightness. Skin: Prolonged or repeated skin contact can cause dermatitis. Ingestion: Prolonged or repeated ingestion may affect the liver, and blood.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD 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

UN number:

ADR/RID:

IMDG:

IATA:

UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

Transport hazard class (es):

ADR/RID:

IMDG:

IATA:

Packaging group:

ADR/RID:

IMDG:

IATA:

Environmental hazards:

ADR/RID:

IMDG Marine pollutant:

IATA:

SECTION 15: OTHER REGULATORY INFORMATION

Federal and State Regulations: TSCA 8(b) inventory: SODIUM BISULPHITE, AR GRADE

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC): R22

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 0

Reactivity: 0



Personal Protection: E

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

Health: 2

Flammability: 0

Reactivity: 0

Specific hazard: Not Available.

Protective Equipment: Gloves, Lab coat, Safety glasses, Dust respirator - be sure to use an approved/certified respirator or equivalent.

SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.

H302 - Acute toxicity, Oral (Category 4) - Harmful if swallowed.

H318 - Serious eye damage (Category 1) - Causes serious eye damage.

The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.