Material Safety Data Sheets

Revision 2

1. IDENTIFICATION

Product Name	**Sodium Metabisulphite**
Other Names	No Data Available
Uses	For industrial use, food additive, reducing agent, whitening agent, for professional use.
Chemical Family	No Data Available
Chemical Formula	$H_2O_5S_2.2Na$
Chemical Name	Disulfurous acid, sodium salt
Product Description	No Data Available
Company	**Arman sina.co**
Contact Information	info@armansina.com **www.armansina.com**

2. HAZARD IDENTIFICATION

Hazard Categories	Acute Toxicity
	Serious Eye Damage/Irritation
Risk Phrases	Harmful if swallowed.
	Causes serious eye damage.
	Contact with acids liberates toxic gas
	Wash exposed skin thoroughly after handling.
Safety Phrases	Do not eat, drink or smoke when using this product.
	Wear eye protection/face protection.
	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
	Rinse mouth. 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 CENTRE/doctor.
	Dispose of contents/container in accordance with local / regional / national / international regulations.
Symbol	

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Sodium metabisulphite	$H_2O_5S_2.2Na$	7681-57-4	>=90 - 100 %

4. FIRST AID MEASURES

Description of necessary measures according to routes of exposure

Swallowed	IF SWALLOWED: Rinse mouth, then drink a glass of water. Do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician for advice.
Eye	IF IN EYES: Protect uninjured eye! Immediately flush eyes with running water for several minutes, holding eyelids open and occasionally lifting the upper and lower lids. Remove contact lenses if present and easy to do. Continue rinsing for at least 15 minutes. Immediately call a Poison Centre or doctor/physician for advice.
Skin	IF ON SKIN: Remove contaminated clothing and shoes immediately. Wash skin with plenty of soap and water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing and shoes before reuse.
Inhaled	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, get medical advice/attention.
Advice to Doctor	Treat symptomatically. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
Medical Conditions Aggravated by Exposure	**Sodium metabisulfite may enhance symptoms of asthma in sensitive individuals. Approx. 1 % of the population is sensitive** to sulfites.

5. FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area. Cool containers with water spray until well after fire is out.
Flammability Conditions	Non-combustible material.
Extinguishing Media	If material is involved in a fire, use water spray or Carbon dioxide (CO2) for extinction. In case of fire in the surroundings, use appropriate extinguishing media.
Fire and Explosion Hazard	Decomposes on heating; This produces sulfur oxides.
Hazardous Products of Combustion	Fire or heat may produce irritating, toxic and/or corrosive fumes. Do not inhale explosion and combustion gases.
Special Fire Fighting Instructions	Collect contaminated fire extinguishing water separately - This must not be discharged into drains.
Personal Protective Equipment	Wear self contained breathing apparatus (SCBA) and chemical splash suit. SCBA and structural firefighter's uniform may provide limited protection.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	No Data Available

6. ACCIDENTAL RELEASE MEASURES

General Response Procedure	Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing.
Clean Up Procedures	Collect material (sweep or vacuum up) and seal in properly labelled containers for disposal (see SECTION 13). If appropriate, moisten first to prevent dusting.
Containment	Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas. Prevent dust cloud.
Decontamination	Wash area with plenty of water. Retain contaminated washing water and dispose appropriately.
Environmental Precautionary Measures	Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. In case of escape/entry into waterways, soil or drains, inform the responsible authorities.
Evacuation Criteria	Spill or leak area should be isolated immediately. Remove persons to safety. Keep unauthorised/unprotected personnel away.
	Use personal protective equipment as required (see SECTION 8).

	Use personal protective equipment as required (see SECTION 8).
Personal Precautionary Measures	

7. HANDLING AND STORAGE

Handling	Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid generating dust. Avoid breathing dust and contact with eyes, skin and clothing. Do not ingest. Use personal protective equipment as required (see SECTION 8). Before making transfer operations, make sure that there aren't any incompatible material residuals in the containers.
Storage	Store in a cool, dry and well-ventilated place, out of direct sunlight. Keep container tightly closed. Avoid exposure to air and moisture. Keep away from heat and sources of ignition - No smoking. Keep away from food/feedstuffs and incompatible materials (see SECTION 10).
Container	Keep in the original container. Do not reuse empty containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General	For Sodium metabisulphite (CAS No. 7681-57-4): - Safe Work Australia Exposure Standard: TWA = 5 mg/m3 - New Zealand Workplace Exposure Standard: TWA = 5 mg/m3 - NIOSH REL: TWA = 5 mg/m3
Exposure Limits	No Data Available
Biological Limits	No information available.
Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Protection Equipment	- Respiratory protection: In case of inadequate ventilation, wear respiratory protection. Recommended: Dust mask/particle filter device (refer to AS/NZS 1715 & 1716). - Eye/face protection: Wear appropriate eye protection to prevent eye contact. Recommended: Eye glasses with side protection or chemical goggles. - Hand protection: Handle with gloves. Recommended: Impervious gloves. Use protective gloves that provide comprehensive protection. - Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact. Recommended: Overalls, safety shoes. Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
Special Hazards Precaustions	No information available.
Work Hygienic Practices	Do not eat, drink or smoke when using this product. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or reuse. Contaminated clothing should be changed before entering eating areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystals or powder
Odour	Pungent (sulfur dioxide)
Colour	White
pH	3.5 - 5.0 (5%)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	No Data Available

Melting Point	>150 ° C
Freezing Point	No Data Available
Solubility	470 g/L in water 20° C
Specific Gravity	1.2 - 1.3
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temperature	No Data Available
Density	No Data Available
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	-3.7
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No information available.
Potential for Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties That May Initiate or Contribute to Fire Intensity	Non-combustible material.
Reactions That Release Gases or Vapours	Decomposes on heating and on contact with acids - This produces sulfur oxides.
Release of Invisible Flammable Vapours and Gases	No information available.

10. STABILITY AND REACTIVITY

General Information	The substance is a strong reducing agent; It reacts violently with oxidants. Slowly oxidised to sulfate on exposure to air and moisture. Contact with acids liberates toxic gas (sulfur oxides).
Chemical Stability	Stable under normal conditions.
Conditions to Avoid	Avoid generating dust. Avoid exposure to heat.
Materials to Avoid	Incompatible/reactive with acids and oxidising agents.
Hazardous Decomposition Products	Decomposes on heating and on contact with acids - This produces sulfur oxides.
Hazardous Polymerisation	No information available.

11. TOXICOLOGICAL INFORMATION

General Information

- Acute toxicity: Harmful if swallowed. The substance is severely irritating to the gastrointestinal tract; Symptoms include abdominal pain, diarrhoea, nausea, vomiting.
- Skin corrosion/irritation: Not classified; Based on available data, the classification criteria are not met.
- Serious eye damage/irritation: Causes serious eye damage. Symptoms include redness, pain.
- Respiratory/skin sensitisation: Not classified; Based on available data, the classification criteria are not met. Inhalation may cause asthma-like reactions in sensitive individuals.
- Germ cell mutagenicity: Not classified; Based on available data, the classification criteria are not met.
- Carcinogenicity: Not classified; Based on available data, the classification criteria are not met.
- Reproductive toxicity: Not classified; Based on available data, the classification criteria are not met.
- STOT (single exposure): Not classified; Based on available data, the classification criteria are not met. Breathing in dust may be irritating to the respiratory tract.
- STOT (repeated exposure): Not classified; Based on available data, the classification criteria are not met.
- Aspiration hazard: Not classified; Based on available data, the classification criteria are not met.

Acute

Ingestion

Acute toxicity (Oral):
- LD50, Rat: >1,540 mg/kg (Sodium metabisulphite) [Supplier's SDS].

Carcinogen Category

None

12. ECOLOGICAL INFORMATION

Ecotoxicity

Aquatic acute toxicity (Sodium metabisulphite):
- LC50, Fish = 150 - 220 mg/l (96 h).
- EC50, Daphnia = 89 mg/l (48 h).
- EC50, Algae = 48 mg/l (72 h).
- EC50, Bacteria = 56 mg/l (17 h).

Persistence/Degradability

No information available.

Mobility

No information available.

Environmental Fate

Not classified for environmental hazards - Based on available data, the classification criteria are not met. Adopt good working practices, so that the product is not released into the environment.

Bioaccumulation Potential

No information available.

Environmental Impact

No Data Available

13. DISPOSAL CONSIDERATIONS

General Information

Dispose of contents/container in accordance with current local/regional/national regulations.

Special Precautions for Land Fill

Recover if possible. Send waste to an authorised disposal facility for incineration under controlled conditions.

14. TRANSPORT INFORMATION

Land Transport

Proper Shipping Name

Sodium metabisulphite

Class

No Data Available

Subsidiary Risk(s)

No Data Available

	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for LAND transport.

Sea Transport

Proper Shipping Name	Sodium metabisulphite
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
EMS	No Data Available
Marine Pollutant	No
Comments	NON-DANGEROUS GOODS: Not regulated for SEA transport.

Air Transport

Proper Shipping Name	Sodium metabisulphite
Class	No Data Available
Subsidiary Risk(s)	No Data Available
UN Number	No Data Available
Hazchem	No Data Available
Pack Group	No Data Available
Special Provision	No Data Available
Comments	NON-DANGEROUS GOODS: Not regulated for AIR transport.

16. OTHER INFORMATION

Revision	2
Key/Legend	**< Less Than** **> Greater Than** **atm Atmosphere** **CAS Chemical Abstracts Service (Registry Number)** **cm² Square Centimetres** **CO2 Carbon Dioxide** **COD Chemical Oxygen Demand** **deg C (° C) Degrees Celcius** **deg F (° F) Degrees Farenheit** **g Grams** **g/cm³ Grams per Cubic Centimetre** **g/l Grams per Litre** **HSNO Hazardous Substance and New Organism** **IDLH Immediately Dangerous to Life and Health** **immiscible Liquids are insoluable in each other.**

inHg Inch of Mercury
inH2O Inch of Water
K Kelvin
kg Kilogram
kg/m³ Kilograms per Cubic Metre
lb Pound
LC50 LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals. The material is inhaled over a set period of time, usually 1 or 4 hours.
LD50 LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals.
ltr or L Litre
m³ Cubic Metre
mbar Millibar
mg Milligram
mg/24H Milligrams per 24 Hours
mg/kg Milligrams per Kilogram
mg/m³ Milligrams per Cubic Metre
Misc or Miscible Liquids form one homogeneous liquid phase regardless of the amount of either component present.
mm Millimetre
mmH2O Millimetres of Water
mPa.s Millipascals per Second
N/A Not Applicable
NIOSH National Institute for Occupational Safety and Health
NOHSC National Occupational Heath and Safety Commission
OECD Organisation for Economic Co-operation and Development
Oz Ounce
PEL Permissible Exposure Limit
Pa Pascal
ppb Parts per Billion
ppm Parts per Million
ppm/2h Parts per Million per 2 Hours
ppm/6h Parts per Million per 6 Hours
psi Pounds per Square Inch
R Rankine
RCP Reciprocal Calculation Procedure
STEL Short Term Exposure Limit
TLV Threshold Limit Value
tne Tonne
TWA Time Weighted Average
ug/24H Micrograms per 24 Hours

UN United Nations
wt Weight