SAFETY DATA SHEET

Sodium bisulfate

This SDS is valid for all grades and catalog numbers

1. IDENTIFICATION OF SUBSTANCE / MIXTURE AND OF SUPPLIER

Product Identifier: High Purity Chemicals

Synonyms: Sodium hydrogen sulfate; sodium acid sulfate; sulfuric acid, monosodium salt, monohydrate; sodium pyrosulfate; sodium hydrosulphate;

Other means of identification: CAS No. 7681-38-1
EINECS No. 231-665-7

Recommended use of the chemical and restrictions on use:

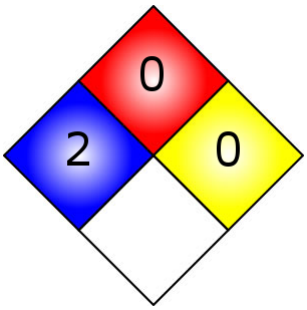
Supplier Details:
Pharmco Products, Inc.
58 Vale Road, Brookfield,
CT 06804, USA.
Tel: 203.740.3471
Fax: 203.740.3481
CCN17213

Emergency Contact: **CHEMTREC: 1.800.424.9300 (USA) / +1.703.527.3887 (International)**

2. HAZARDS IDENTIFICATION

OSHA Hazards:
Irritant

NFPA



GHS label elements, including precautionary statements

Signal Word:
DANGER!

Hazard statement(s)

H318	Causes serious eye damage.

Precautionary statement(s)

P280	Wear protective gloves and eye and face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.
P310	Immediately call a POISON CENTER or doctor/ physician.

GHS Classification(s)
Eye damage (Category 1)

Other hazards which do not result in classification:

Potential Health Effects:

Organ	Description
Eyes	Causes irritation of the eye.
Ingestion	Harmful if ingested.
Inhalation	Harmful if inhaled. Can cause respiratory tract irritation.
Skin	Harmful if absorbed through skin. Causes skin irritation.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical identity:	Sodium bisulfate
Common name / Synonym:	Sodium hydrogen sulfate; sodium acid sulfate; sulfuric acid, monosodium salt, monohydrate; sodium pyrosulfate; sodium hydrosulphate
CAS number:	7681-38-1
RTECS #:	VZ1860000
EC #:	231-665-7

% Weight	Material	CAS

90-100	Sodium bisulfate	7681-38-1

4. FIRST AID MEASURES

General advice

Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Skin

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing/shoes.

Inhalation

Remove person to fresh air. If signs/symptoms continue, get medical attention. Give oxygen or artificial respiration as needed.

Eyes

Thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists, seek medical attention.

Ingestion

Do NOT induce vomiting.If vomiting does occur, have victim lean forward to prevent aspiration If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

No data available.

Special protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool by spraying with water.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Wear respiratory protection. Do not inhale vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations.

Vapors can accumulate in low areas.

Environmental precautions:

Stop leak. Contain spill if possible and safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up:

Sweep up and place material in a convenient waste disposal container. Keep container closed.

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7. HANDLING AND STORAGE

Precautions for safe handling:

Do not get on skin or in eyes. Avoid formation of dust and aerosols. Provide proper exhaust ventilation system in areas where dust forms.

Conditions for safe storage, including any incompatibilites:

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters, e.g., occupational exposure limit values or biological limit values:

Occupational Exposure Limits

Component	Source	Type	Value	Note
Sodium bisulfate	/		Not Available	

Appropriate engineering controls:

General room or local exhaust ventilation is usually required to meet exposure limit(s). Electrical equipment should be grounded and conform to applicable electrical code.

Individual protection measures, such as personal protective equipment:

Respiratory protection:

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection:

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection:

Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU) Maintain eye wash fountain and quick-drench facilities in work area.

Skin and body protection:
Wear impervious, flame retardant, antistatic protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance *(physical state, color, etc.)*	Colorless crystals
Odor	Odorless
pH	1.4
Freezing point	58 °C (136 °F)
Vapor pressure	5 hPa (4 mmHg) at 20 °C (68 °F)
Relative Density	2.10
Solubility(ies)	67g/100g water.

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under ordinary conditions of use and storage. Hygroscopic.
Possibility of hazardous reactions	No data available
Conditions to avoid (e.g., static discharge, shock or vibration)	Moisture
Incompatible materials	Strong bases, calcium hypochlorite and sodium carbonate.
Hazardous decomposition products	Hazardous Decomposition Products Under Fire Conditions: Sulphur oxides, Sodium oxides.

11. TOXICOLOGICAL INFORMATION

- Sodium bisulfate 7681-38-1

Product Summary:
No data available for the teratogenic, mutagenic, or reproductive toxicity effects of this product.

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable or

confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Other Hazards

Organ	Description
Eyes	Causes irritation of the eye.
Ingestion	Harmful if ingested.
Inhalation	Harmful if inhaled. Can cause respiratory tract irritation.
Skin	Harmful if absorbed through skin. Causes skin irritation.

12. ECOLOGICAL INFORMATION

- Sodium bisulfate 7681-38-1

Ecotoxicity (aquatic and terrestrial, where available):
Ecotoxicity
No data available

13. DISPOSAL CONSIDERATIONS

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not a listed RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

Description of waste residues and information on their safe handling and methods of disposal:

UN number	Not a dangerous good.

IMDG
UN-Number: Not a dangerous good.
Marine pollutant: No
IATA
UN-Number: Not a dangerous good.

15. REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question:

OSHA Hazards
Irritant

All ingredients are on the following inventories or are exempted from listing

Country	Notification
Australia	AICS
Canada	DSL
China	IECS
European Union	EINECS
Japan	ENCS/ISHL
Korea	ECL
New Zealand	NZIoC
Philippines	PICCS
United States of America	TSCA

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute Health Hazard

Pennsylvania Right To Know Components
Sodium hydrogensulphate CAS-No. 7681-38-1 Revision Date 1989-12-01

New Jersey Right To Know Components
Sodium hydrogensulphate CAS-No. 7681-38-1 Revision Date 1989-12-01

California Prop 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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16. OTHER INFORMATION: INCLUDING INFORMATION ON PREPARATION AND REVISION OF THE SDS

Disclaimer
PHARMCO-AAPER believes that the information on this SDS was obtained from reliable sources. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, PHARMCO-AAPER does not assume responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with handling, storage, use, or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable. Information is correct to the best of our knowledge at the date of the SDS publication.