according to 29CFR1910/1200 and GHS Rev. 3

**Effective date** : 12.16.2014

#### Sodium Bisulfate

| Product name :  | Sodium Bisulfate  |  |
|---|-------------------|--|
| Manufacturer/Supplier Trade name:                             |                   |  |
| Manufacturer/Supplier Article number:                         | S25535A           |  |
| Recommended uses of the product and uses res                  | trictions on use: |  |
| Manufacturer Details:   |                   |  |
| AquaPhoenix Scientific<br>9 Barnhart Drive, Hanover, PA 17331 |                   |  |
| Supplier Details:   |                   |  |
| Ficher Science Education                                      |                   |  |

Fisher Science Education 15 Jet View Drive, Rochester, NY 14624

#### **Emergency telephone number:**

Fisher Science Education Emergency Telephone No.: 800-535-5053

#### **SECTION 2 : Hazards identification**

#### Classification of the substance or mixture:



Serious eye damage (Category 1)

#### Signal word : Danger

#### Hazard statements:

Causes serious eye damage Causes severe skin burns and eye damage May cause respiratory irritation **Precautionary statements**: If medical advice is needed, have product container or label at hand Keep out of reach of children Read label before use Do not eat, drink or smoke when using this product

#### Combustible Dust Hazard: :

May form combustible dust concentrations in air (during processing).

### Other Non-GHS Classification:

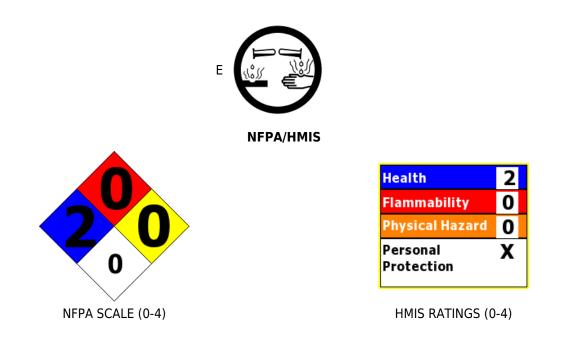
#### WHMIS

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#### SECTION 3 : Composition/information on ingredients

# Ingredients: Sodium bisulfate monohydrate

CAS 10034-88-5

100 %

Percentages are by weight

#### **SECTION 4 : First aid measures**

#### **Description of first aid measures**

After inhalation: Remove to fresh air. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing difficult, give oxygen.

After skin contact: Flush with water for 15 minutes. Get medical assistance if irritation develops. Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists.

After eye contact: Immediately flush eyes with water for at least 15 minutes. Immediately get medical assistance. Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Do NOT induce vomiting. Dilute with water. Get medical assistance. Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

#### Most important symptoms and effects, both acute and delayed:

Irritation, Nausea, Headache, Shortness of breath.;

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

#### **SECTION 5 : Firefighting measures**

#### Extinguishing media

Suitable extinguishing agents: If in laboratory setting, follow laboratory fire suppression procedures. Use

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appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### For safety reasons unsuitable extinguishing agents:

#### Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors.Thermal decomposition can lead to release of irritating gases and vapors.Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

#### Advice for firefighters:

**Protective equipment:** Use NIOSH-approved respiratory protection/breathing apparatus.

**Additional information (precautions):** Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.Use spark-proof tools and explosion-proof equipment.

#### **SECTION 6 : Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Transfer to a disposal or recovery container.Use spark-proof tools and explosionproof equipment.Use respiratory protective device against the effects of fumes/dust/aerosol. Keep unprotected persons away. Ensure adequate ventilation.Keep away from ignition sources. Protect from heat.Stop the spill, if possible. Contain spilled material by diking or using inert absorbent.

#### **Environmental precautions:**

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13

#### Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures.Collect liquids using vacuum or by use of absorbents. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

#### **Reference to other sections:**

#### SECTION 7 : Handling and storage

### Precautions for safe handling:

Minimize dust generation and accumulation. Wash hands after handling. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan.Use only in well ventilated areas.Avoid generation of dust or fine particulate.Avoid contact with eyes, skin, and clothing.

#### Conditions for safe storage, including any incompatibilities:

Store in a cool location. Provide ventilation for containers. Avoid storage near extreme heat, ignition sources or open flame. Store away from foodstuffs. Store away from oxidizing agents. Store in cool, dry conditions in well sealed containers. Keep container tightly sealed.

#### SECTION 8 : Exposure controls/personal protection



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| Sodium Bisulfate                  |  |  |  |
|-----------------------------------|--|--|--|
|                                   |  |  |  |
| Control Parameters:               | 10034-88-5, Sodium bisulfate monohydrate, Contains no substances with occupational exposure limit values   |  |  |
| Appropriate Engineering controls: | Emergency eye wash fountains and safety showers should be available in<br>the immediate vicinity of use/handling.Provide exhaust ventilation or<br>other engineering controls to keep the airborne concentrations of vapor<br>or dusts (total/respirable) below the applicable workplace exposure limits<br>(Occupational Exposure Limits-OELs) indicated above.Use under a fume<br>hood. It is recommended that all dust control equipment such as local<br>exhaust ventilation and material transport systems involved in handling<br>of this product contain explosion relief vents or an explosion suppression<br>system or an oxygen deficient environment.Ensure that dust-handling<br>systems (such as exhaust ducts, dust collectors, vessels, and processing<br>equipment) are designed in a manner to prevent the escape of dust into<br>the work area (i.e., there is no leakage from the equipment). |  |  |
| Respiratory protection:           | Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable.  |  |  |
| Protection of skin:               | The glove material has to be impermeable and resistant to the product/<br>the substance/ the preparation being used/handled.Selection of the glove<br>material on consideration of the penetration times, rates of diffusion and<br>the degradation.   |  |  |
| Eye protection:                   | Safety glasses with side shields or goggles.   |  |  |
| General hygienic measures:        | The usual precautionary measures are to be adhered to when handling<br>chemicals. Keep away from food, beverages and feed sources.<br>Immediately remove all soiled and contaminated clothing. Wash hands<br>before breaks and at the end of work. Do not inhale<br>gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and<br>skin.   |  |  |

# SECTION 9 : Physical and chemical properties

| Appearance (physical state,color): | Colorless Crystals. | Explosion limit lower:<br>Explosion limit upper: | Not Determined<br>Not Determined                          |
|------------------------------------|---------------------|--|---|
| Odor:                              | Odorless            | Vapor pressure:                                  | Not Determined  |
| Odor threshold:                    | Not Determined      | Vapor density:                                   | Not Determined  |
| pH-value:                          | ~1                  | Relative density:                                | Not Determined  |
| Melting/Freezing point:            | 183C                | Solubilities:                                    | Soluble in Water  |
| Boiling point/Boiling<br>range:    | Decomposes          | Partition coefficient (n-<br>octanol/water):     | Not Determined  |
| Flash point (closed<br>cup):       | Not Determined      | Auto/Self-ignition<br>temperature:               | Not Determined  |
| Evaporation rate:                  | Not Determined      | Decomposition<br>temperature:                    | 430C  |
| Flammability<br>(solid,gaseous):   | Not Determined      | Viscosity:                                       | a. Kinematic:Not Determined<br>b. Dynamic: Not Determined |
| Density: Not Determined            |                     |  |   |

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#### **SECTION 10 : Stability and reactivity**

#### Reactivity:

**Chemical stability:**table under normal temperatures and pressures. Hygroscopic.No decomposition if used and stored according to specifications.

#### Possible hazardous reactions:

**Conditions to avoid:**Store away from oxidizing agents, strong acids or bases. **Incompatible materials:**Strong bases, Strong oxidizing agents. Strong acids.Strong bases. **Hazardous decomposition products:**Sulphur oxides, Sodium oxides. Carbon oxides (CO, CO2).

#### SECTION 11 : Toxicological information

| Acute Toxicity: No additional information.       |                            |  |
|--|----------------------------|--|
| Chronic Toxicity: No additional information.     |                            |  |
| Corrosion Irritation: No additional information. |                            |  |
| Sensitization:                                   | No additional information. |  |
| Single Target Organ (STOT):                      | No additional information. |  |
| Numerical Measures:                              | No additional information. |  |
| Carcinogenicity:                                 | No additional information. |  |
| Mutagenicity:                                    | No additional information. |  |
| Reproductive Toxicity:                           | No additional information. |  |

#### **SECTION 12 : Ecological information**

Ecotoxicity Persistence and degradability: Readily degradable in the environment. Bioaccumulative potential: Mobility in soil: Other adverse effects:

#### SECTION 13 : Disposal considerations

#### Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/ provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

#### **SECTION 14 : Transport information**

#### **UN-Number**

3260

#### **UN proper shipping name**

CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.,

#### Transport hazard class(es)

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Class: 8 Corrosive substances

Packing group:III Environmental hazard: Transport in bulk: Special precautions for user:

**SECTION 15 : Regulatory information** 

#### **United States (USA)**

#### SARA Section 311/312 (Specific toxic chemical listings):

None of the ingredients is listed

#### SARA Section 313 (Specific toxic chemical listings):

None of the ingredients is listed

#### RCRA (hazardous waste code):

None of the ingredients is listed

#### TSCA (Toxic Substances Control Act):

All ingredients are listed.

#### CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

#### Proposition 65 (California):

#### Chemicals known to cause cancer:

None of the ingredients is listed

#### Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

#### Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

#### Chemicals known to cause developmental toxicity:

None of the ingredients is listed

#### Canada

#### Canadian Domestic Substances List (DSL):

All ingredients are listed.

#### Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

#### Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

#### **SECTION 16 : Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.Note:. The responsibility to provide a safe workplace remains with the user.The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct

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employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

#### GHS Full Text Phrases:

#### Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods PNEC: Predicted No-Effect Concentration (REACH) CFR: Code of Federal Regulations (USA) SARA: Superfund Amendments and Reauthorization Act (USA) RCRA: Resource Conservation and Recovery Act (USA) TSCA: Toxic Substances Control Act (USA) NPRI: National Pollutant Release Inventory (Canada) DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) DNEL: Derived No-Effect Level (REACH)

**Effective date** : 12.16.2014 **Last updated** : 03.19.2015