1. PRODUCT AND COMPANY IDENTIFICATION

- **Product name**: Sodium bisulfite solution
- **Product Number**: 72277
- **Brand**: Fluka
- **Company**: Sigma-Aldrich
  
  3050 Spruce Street
  SAINT LOUIS MO 63103
  USA
- **Telephone**: +1 800-325-5832
- **Fax**: +1 800-325-5052
- **Emergency Phone #**: (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydrosulphite</td>
<td>7631-90-5</td>
<td>231-548-0</td>
<td>&gt;= 38 - &lt;= 40 %</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>&gt;= 60 - &lt;= 62 %</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

**Emergency Overview**

- **OSHA Hazards**: No known OSHA hazards

**HMIS Classification**

- **Health Hazard**: 2
- **Flammability**: 0
- **Physical hazards**: 2

**NFPA Rating**

- **Health Hazard**: 2
- **Fire**: 0
- **Reactivity Hazard**: 2

**Potential Health Effects**

- **Inhalation**: May be harmful if inhaled. May cause respiratory tract irritation.
- **Skin**: May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes**: May cause eye irritation.
- **Ingestion**: May be harmful if swallowed.
- **Aggravated**: bronchoconstriction, bronchospasm, Gastrointestinal disturbance, flushing,
Medical Condition: hypotension, tingling sensation, urticaria/angioedema, Shock., Exposure can aggravate; Asthma.

4. FIRST AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Flammable properties
Flash point: not applicable
Ignition temperature: no data available

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus for fire fighting if necessary.

Further information
The product itself does not burn.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Environmental precautions
Do not let product enter drains.

Methods for cleaning up
Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
Avoid inhalation of vapour or mist.

Storage
Keep container tightly closed in a dry and well-ventilated place.
Do not store near acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
</table>

Fluka - 72277 Sigma-Aldrich Corporation www.sigma-aldrich.com
<table>
<thead>
<tr>
<th>Parameters</th>
<th>Sodium hydrogensulphite</th>
<th>7631-90-5</th>
<th>TWA</th>
<th>5 mg/m³</th>
<th>1996-05-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remarks</td>
<td>The agent (mixture, or exposure circumstance) is not classifiable as to its carcinogenicity to humans. Refers to Appendix A -- Carcinogens. 1996 Adoption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m³</td>
<td>1989-03-01</td>
<td>1979-03-01</td>
<td></td>
</tr>
</tbody>
</table>

**Personal protective equipment**

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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**
For prolonged or repeated contact use protective gloves.

**Eye protection**
Safety glasses

**Skin and body protection**
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**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**
- Form: liquid

**Safety data**
- pH: no data available
- Melting point: no data available
- Boiling point: no data available
- Flash point: not applicable
- Ignition temperature: no data available
Lower explosion limit  no data available
Upper explosion limit  no data available
Water solubility      no data available

10. STABILITY AND REACTIVITY

Storage stability
Stable under recommended storage conditions.

Materials to avoid
Strong acids, Strong oxidizing agents

Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Sodium/sodium oxides, Sulphur oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity
no data available

Irritation and corrosion
no data available

Sensitisation
Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Chronic exposure
IARC: Group 3 - Not classifiable as to carcinogenicity to humans (Sodium hydrogensulphite)
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.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.
Aggravated bronchoconstriction, bronchospasm, Gastrointestinal disturbance, flushing, hypotension, tingling sensation, urticaaria/angioedema, Shock.
Medical Condition Exposure can aggravate; Asthma,

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
no data available

Ecotoxicity effects
13. DISPOSAL CONSIDERATIONS

Product
Observe all federal, state, and local environmental regulations.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
UN-Number: 2693  Class: 8  Packing group: III
Proper shipping name: Bisulfites, aqueous solutions, n.o.s.
Marine pollutant: No
Poison Inhalation Hazard: No

IMDG
UN-Number: 2693  Class: 8  Packing group: III  EMS-No: F-A, S-B
Proper shipping name: BISULPHITES, AQUEOUS SOLUTION, N.O.S. (Sodium hydrogensulphite)
Marine pollutant: No

IATA
UN-Number: 2693  Class: 8  Packing group: III
Proper shipping name: Bisulphites, aqueous solution n.o.s.

15. REGULATORY INFORMATION

OSHA Hazards
No known OSHA hazards

DSL Status
All components of this product are on the Canadian DSL list.

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

SARA 313 Components
SARA 313: 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
No SARA Hazards

Massachusetts Right To Know Components

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydrogensulphite</td>
<td>7631-90-5</td>
<td>1989-12-01</td>
</tr>
</tbody>
</table>

Pennsylvania Right To Know Components

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>1989-12-01</td>
</tr>
<tr>
<td>Sodium hydrogensulphite</td>
<td>7631-90-5</td>
<td>1989-12-01</td>
</tr>
</tbody>
</table>

New Jersey Right To Know Components

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.</th>
<th>Revision Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>1989-12-01</td>
</tr>
<tr>
<td>Sodium hydrogensulphite</td>
<td>7631-90-5</td>
<td>1989-12-01</td>
</tr>
</tbody>
</table>
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information
Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.