1. IDENTIFICATION

Product Identifier
Product Name         PENETONE 7010M
Chemical Name        Sodium bisulfite solution

Recommended use of the chemical and restrictions on use
Recommended use       Oxygen scavenger, biocide deactivation, reducing agent, dechlorination, water treatment
Restrictions on use   For industrial use only

Supplier details
West Penetone Inc.
11411-160 Street
Edmonton, AB,
T5M3T7
Tel: 780-454-3919

Emergency Telephone Number
Canutec (613)-996-6666 or 1-888-226-8832 – FOR 24 HOUR TRANSPORT EMERGENCY WITHIN CANADA
Chemtrec 1-800-424-9300 – FOR 24 HOUR TRANSPORT EMERGENCY WITHIN USA

2. HAZARDS IDENTIFICATION

Classification
<table>
<thead>
<tr>
<th>Corrosive to metals</th>
<th>Category 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2</td>
</tr>
</tbody>
</table>

Label Elements

DANGER

Hazard Statements
May be corrosive to metals
Causes skin and eye irritation

Precautionary Statements - Prevention
Keep only in original packaging
Wash face, hands, and any exposed skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response
IF ON SKIN (or hair): Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Absorb spillage to prevent material damage
3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium hydrogensulphite</td>
<td>7631-90-5</td>
<td>36-40</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Ingestion
Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin contact
Wash with plenty of water. If skin irritation occurs, get medical advice/attention. Take off contaminated clothing.

Inhalation
Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Eye contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Most important symptoms and effects, both acute and delayed
Contact with eyes may cause serious irritation leading to discomfort or pain, excess blinking and tear production with marked excess redness and swelling of the conjunctiva. Contact with skin may cause irritation with local redness and aggravate previous medical skin conditions. Inhalation may cause severe respiratory irritation. Ingestion may cause irritation of the mucous membranes, esophagus, and gastrointestinal tract leading to discomfort or nausea.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

Unsuitable Extinguishing Media
None.

Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed including oxides of sulfur.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures
Avoid contact with skin, eyes, and clothing. Use personal protective equipment. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid using material handling equipment with exposed metal surfaces.

Environmental Precautions
Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up
Contain and solidify with inert absorbent material. Keep in suitable, vented containers for disposal. Following product recovery, flush contaminated area with water. For large spills, stop flow of material, prevent product from entering drains, and pump off product where this is without risk and possible. Proceed as above.
7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling
Avoid contact with skin, eyes, and clothing. Use recommended personal protective equipment.

Conditions for safe storage, including any incompatibilities

Storage
Keep in original containers away from direct sunlight in a dry, cool and well-ventilated place, away from incompatible materials.

Incompatible Materials
Strong oxidizing agents or acid, metals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium bisulphite 7631-90-5</td>
<td>TWA: 5 mg/m³</td>
<td>Not available</td>
<td>REL-TWA - 5 mg/m³</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls
Eyewash facilities and safety showers should be made available when handling this product. Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face Protection
Safety glasses with side shields or goggles.

Skin and body protection
Wear protective gloves and protective clothing.

Respiratory Protection
Wear respiratory protection in case of vapor/aerosol release.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:
Colorless to pale yellow liquid

ODOR:
Sulphurous

ODOR THRESHOLD:
Not applicable

pH:
3.8 – 5.2

MELTING POINT / FREEZING POINT:
Approx. 6°C (-43°F)

BOILING POINT/BOILING RANGE:
Approx. 104°C (219°F)

FLASH POINT:
None

EVAPORATION RATE, water = 1:
1

FLAMMABILITY (SOLID, GAS):
Not applicable

VAPOR PRESSURE, mm Hg AT 20°C (68°F):
78

VAPOR DENSITY (Air = 1):
Not available

RELATIVE DENSITY AT 20°C (68°F):
1.300-1.400

SOLUBILITY IN WATER:
Complete

PARTITION COEFFICIENT, N-OCTANOL/WATER:
Not available

AUTO-IGNITION TEMPERATURE:
Not available

DECOMPOSITION TEMPERATURE:
Approx. 150°C (302°F)

VISCOSITY:
Not available

FLAMMABLE LIMITS:
UPPER: Not applicable  LOWER: Not applicable
10. STABILITY AND REACTIVITY

Reactivity
May be corrosive to metals. Reacts with acids to form toxic and corrosive sulfur dioxide.

Chemical Stability
Light sensitive and temperature sensitive.

Possibility of hazardous reactions
Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid
Extreme temperatures. Store away from incompatible materials. Do not freeze.

Incompatible Materials
Strong oxidizing agents or acids, metals.

Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition can lead to release of oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydrogensulphite 7631-90-5</td>
<td>4000 mg/kg (rat)</td>
<td>&gt;3000 mg/kg (rat)</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Information on likely sources of exposure

- Ingestion: May cause discomfort or nausea.
- Skin corrosion/irritation: May cause skin irritation.
- Inhalation: May cause respiratory irritation.
- Serious eye damage/irritation: Causes serious eye irritation.

Delayed and immediate effects and also chronic effects from short and long-term exposure

- Respiratory or skin sensitization: This material may provoke a response in those who are sensitive to sulphites.
- Germ cell mutagenicity: None known.
- Carcinogenicity: No listed carcinogens.
- Reproductive toxicity: No information available.
- STOT - single exposure: No information available.
- STOT-repeated exposure: No information available.
- Aspiration Hazard: None.

Symptoms related to the physical, chemical, and toxicological characteristics
See Sections 2 & 4.

12. ECOLOGICAL INFORMATION

Ecotoxicity
If available, ecotoxicity values of individual components are shown below.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Fish</th>
<th>Waterflea</th>
<th>Algae</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hydrogensulphite 7631-90-5</td>
<td>393 mg/L: 96 h LC50</td>
<td>197 mg/L: 48 h EC50</td>
<td>97 mg/L: 72 h NOEC</td>
</tr>
</tbody>
</table>

Persistence and degradability
Will persist if released into the environment

Bioaccumulative potential
Does not significantly accumulate in organisms.

Mobility in soil
Water soluble and will not absorb to soil

Other adverse effects
Do not release untreated into natural waters. No other adverse environmental
effects are expected.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method
Dispose of in accordance with local regulations.

Contaminated Packaging
Empty containers should be taken for local recycling, recovery, or waste disposal.

14. TRANSPORT INFORMATION

UN Number: 2693
UN Proper Shipping Name: Bisulphites, Aqueous Solution, N.O.S (Sodium bisulphite)
Transport Hazard Class(es)
Class:
TDG: 8
US DOT: 8
IMDG: 8
Label(s): 8
Packing Group: III
Marine Pollutant: No

Special precautions for user: None established

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
This product is not listed in Chapter 17 of the IBC Code.

15. REGULATORY INFORMATION

Canada (DSL/NDSL)
All ingredients contained in this product are in compliance with the Canadian Environmental Protection Act and are listed on the DSL or are exempt.

United States (TSCA)
All ingredients contained in this product are listed on the TSCA inventory or are exempt.

HMIS Information:
Health: 2
Flammability: 0
Reactivity: 1

16. OTHER INFORMATION

Preparation Date 30 June 2020
Revision Date Not applicable
Revision Note Not applicable

Disclaimer
The information provided on this SDS is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.