1. Basic Information:

Manufacturer: Medical Analysis Systems, Inc.
Address: 5300 Adolfo Road
City, ST Zip: Camarillo, CA 93012
Contact: Tech Support
Information Telephone Number: 800-582-3095

Creation date: 06/11/2001
Last Update: 01/20/2003
Chemical State: Liquid
Chemical Type: Mixture

2. Ingredients:

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Chemical Name</th>
<th>EINECS</th>
<th>% Range</th>
<th>NTP</th>
<th>SUB Z</th>
<th>OSHA PEL</th>
<th>ACGIH Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>7632-00-0</td>
<td>Sodium nitrite</td>
<td>231-555-9</td>
<td>.005-.006</td>
<td>X</td>
<td></td>
<td>.1mg/m^3</td>
<td></td>
</tr>
<tr>
<td>54-64-8</td>
<td>Thimerosal</td>
<td>200-210-4</td>
<td>.01-.02</td>
<td>X</td>
<td>X</td>
<td>.01mg/m^3</td>
<td>.1mg/m^3</td>
</tr>
<tr>
<td>68-11-1</td>
<td>Thioglycolic acid</td>
<td>200-677-4</td>
<td>.05-.06</td>
<td>X</td>
<td></td>
<td>1 ppm</td>
<td></td>
</tr>
</tbody>
</table>

None

3. Hazardous Identification:

Hazard Category:
- Acute X
- Chronic
- Fire
- Pressure
- Reactive

Hazardous Identification Information:

Thimerosal is an IRRITANT and SENSITIZER. It contains ~50% elemental mercury. May cause eye and skin irritation. May cause irritation of the digestive tract. May cause respiratory tract irritation. May cause allergic skin rashes. Chronic or excessive overexposure may cause symptoms of mercury poisoning with unusual shyness, muscle tremors, and visual disturbance and kidney effects.

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This material contains human derived proteins. Although the material used in the mixture has been tested for and found negative for HIV, HBsAG, and HCV by FDA approved methods, no test method can offer complete assurance that the above mention or any other infectious agents are absent.

Signs and Symptoms:
- Mercury poisoning - Muscle tremors, visual disturbance and shyness

Medical Conditions Generally Aggravated by Exposure:
- Kidney disease

4. First Aid Measures:

Emergency and First Aid Procedures:

SKIN: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

EYES: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

INGESTION: Never give anything by mouth to an unconscious person. Get medical aid. Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Other Health Warnings:
- Vial cap contains natural dry rubber.
5. Fire Fighting Measures:

Flash Point: N/A
Lower Explosive Limit: Not Available
Upper Explosive Limit: Not Available

Fire Extinguishing Media:
Product is not flammable. Use agent most appropriate to extinguish surrounding fire.

Special Fire Fighting Procedures:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

6. Accidental Release Measures:

Steps to be taken in Case Material is Released or Spilled:
Use proper personal protective equipment as indicated in Section 8

Absorb spill with proper material and place in suitable container. Clean up spills immediately, observing precautions in the Protective Equipment section. Decontaminate all surfaces coming in contact with material using bleach or appropriate disinfectant then rinse with water.

7. Handling and Storage:

Precautions to be taken:
Store in a tightly closed container according to package insert.

Wash thoroughly after handling. Use with adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid ingestion.

Other Precautions:
This product is prepared using human source proteins and body fluids. Donors have been tested by FDA approved methods and found negative for antibodies to HIV-1 and HIV-2, non-reactive for HBsAg, and non-reactive for HCV. Universal precautions should be followed.

8. Exposure Controls/Personal Protection:

Ventilation Requirements:
Facilities storing or utilizing this material should be equipped with eyewash and a Safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment:
Follow good laboratory practice when handling control material. Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or EU Standard EN166. Wear appropriate protective gloves to prevent skin exposure. Wear appropriate clothing to prevent skin exposure. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirement or EU Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

9. Physical and Chemical Properties:

Boiling Point: Not Available
Specific Gravity (H2O = 1): Not Available
Solubility in Water: Soluble
Vapor Density (AIR = 1): Not Available
Appearance and Odor: Clear yellowish liquid - Urine odor

Other Information: pH varies by level 6.5 to 7.8 see package insert.

10. Stability and Reactivity:

Stability:
Stable under normal temperatures and pressure

Incompatibility (Materials to Avoid):
Excessive heat

Decomposition/By Products:
11. Toxicological Information:

The toxicological properties of this material have not been fully investigated.

12. Ecological Information:

No information found.

13. Disposal Considerations:

Chemical waste generators must determine whether a discarded chemical/material is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must dispose of in a manner consistent with federal, state, and local regulations.

**RCRA P Series Waste**
- None of the components are on this list

**RCRA U series Waste**
- None of the components are on this list.

14. Transport Information:

**US DOT** - Not regulated as a hazardous material

**IATA** - No information available

**Canadian TDG** - No information available.

15. Regulatory Information:

**European/International Regulations**

European Labeling in Accordance with EC Directives:
- Hazard Symbols: Xn
- Risk Phrases: R22, R36, R38, and R43

**US Federal**

- **TSCA**
- SARA Section 313 - One or more levels of product contains Sodium Nitrite and Thimerosal which is a mercury containing compound
- **OSHA** - None of the chemicals in this product are considered highly hazardous by OSHA.

**US State**

**STATE RIGHT TO KNOW**

**California Prop 65**

This product contains a chemical know to the state of California to cause cancer
- Gentamicin Sulfate  CAS#  1405-41-0
- Amikacin    CAS#  37517-28-5

16. Other Information:

The above information is derived from various sources and is believed to be accurate and represents the best information currently available to us. However, no warranties, expressed or implied, as to the validity of the data are intended. All materials and mixtures may present unknown hazards and
should be used with caution. Independent professional opinions regarding the risk of handling or exposure to this control are the responsibility of the user.

Medical Analysis Systems, Inc. reserves the right to revise the information on this MSDS, as new information becomes available.