# MATERIAL SAFETY DATA SHEETS

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Kit Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>149</td>
<td>OSOM® Ultra Strep A Test</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Component Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2070</td>
<td>OSOM® Ultra Strep A Extraction Reagent A</td>
</tr>
<tr>
<td>2071</td>
<td>OSOM® Ultra Strep A Extraction Reagent B</td>
</tr>
<tr>
<td>2075</td>
<td>OSOM® Strep A Positive Control</td>
</tr>
<tr>
<td>2076</td>
<td>OSOM® Strep A Negative Control</td>
</tr>
</tbody>
</table>

Note: The page numbers on the 4 individual MSDSs for this kit are specific to each document. There are a total of 32 pages including this cover sheet.

OSOM® Ultra Strep A Test Stick is an “article” and does not require an MSDS.

Effective Date: May 2, 2008
1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: OSOM® Ultra Strep A Extraction Reagent A

Synonym(s): Ultra Strep A Extraction Reagent A


Description: Aqueous solution containing color indicator and inorganic salt.

Corporate Headquarters
Genzyme Corporation
500 Kendall Street
Cambridge, MA 02142
USA
Phone: 617-252-7500

Manufacturer/Distributor
Genzyme Diagnostics
6659 Top Gun Street
San Diego, CA 92121
USA
Phone: 858-452-3198

Emergency Telephone Numbers
Genzyme (U.S.): 617-562-4555
CHEMTREC (U.S.): 800-424-9300
CHEMTREC (Outside U.S.): 703-527-3887

2. HAZARDS IDENTIFICATION

Precautionary Statements:
WARNING! The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Avoid contact with eyes and skin. Do not ingest or inhale. Toxic by ingestion. Harmful by inhalation and in contact with skin. May cause severe eye irritation. Preparation appearance: clear, pink liquid.

Routes of Exposure:
Occupational exposure routes may include inhalation, skin absorption, and eye and skin contact.

Potential Health Effects:

- **Inhalation**: Substantial aerosol inhalation may result in symptoms similar to those specified for ingestion.
- **Eye**: Eye exposure may cause severe irritation, redness, watering, swelling and burning.
- **Skin**: Skin contact with sufficient chemical absorption may result in symptoms similar to those specified for ingestion.
- **Ingestion**: Ingestion may cause gastric irritation, nausea, vomiting and abdominal pain. Significant exposure may result in a drop in blood pressure, headache, dizziness, rapid pulse and visual problems. Skin may be flushed and sweaty and then become cold. Skin and lips may turn blue.
- **Chronic Effects**: Chronic effects from repeated or long-term occupational exposure to this preparation are unknown. Chronic exposure to nitrates may cause headaches, visual problems and decreased blood pressure.

Target Organs: Sodium nitrite: Cardiovascular and central nervous systems.

Regulatory Status:

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Potential Environmental Effects:
May be harmful for the aquatic environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Effective Date: May 02, 2008
Date Printed: May 02, 2008
4. FIRST AID MEASURES

Inhalation:
If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact:
Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain immediate medical attention.

Skin Contact:
In case of contact, immediately flush skin with cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion:
In case of ingestion, contact a poison control center or physician for instructions.

5. FIRE FIGHTING MEASURES

Flammable Properties:
Not considered to be a fire hazard.

Suitable Extinguishing Media:
Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Unsuitable Extinguishing Media:
Unknown.

Specific Hazards Arising from the Chemical:
When heated to decomposition, may produce carbon monoxide (CO), carbon dioxide (CO2), nitrogen oxides (NOx) and sulphur oxides (SOx).

Standard Protective Equipment and Precautions for Firefighters:
Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Avoid physical contact with material and avoid aerosol inhalation. Ensure adequate ventilation. Wear Personal Protective Equipment (PPE) as indicated in Section 8. Wash hands thoroughly after handling.

Environmental Precautions:
Do not let product enter drains.
Methods and Materials for Containment and Clean-Up:
Absorb spill with inert material/sorbent. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. HANDLING AND STORAGE

Handling:
Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Mixing Strep A Extraction Reagents A and B yields nitrous acid, which may immediately decompose into toxic nitrous gas, a short-term reaction by-product. Minimize contact and contamination of personal clothing and skin. Avoid vapor or aerosol inhalation. Wash hands thoroughly after handling.

Storage:
Store at 15 to 30°C (59 to 86°F). Keep container tightly closed in a dry and well-ventilated place. Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:
There are no ACGIH, NIOSH, OSHA or country-specific occupational exposure limits currently established for components present in this preparation at concentrations equal to or greater than 1% (0.1% if carcinogen).

Engineering Controls:
Provide adequate mechanical ventilation to keep airborne concentrations low. Facilities storing or using this preparation should be equipped with an eyewash fountain.

Personal Protective Equipment (PPE):

- **Respiratory**: A respiratory protection program that meets U.S. Federal OSHA 29 CFR 1910.134 and ANSI Z99.2, Canadian CSA Standard Z94.4-93, European Standard CR 529, or other applicable regulatory standards must be followed whenever exposure limits may be exceeded (if applicable), engineering controls are not feasible, or if insufficient ventilation or workplace conditions warrant respirator use.

- **Eye/Face**: Wear appropriate protective chemical safety goggles.

- **Skin**: Wear lab coat or other protective garments. Wear impervious shoe covers for spill clean-up. Remove contaminated clothing promptly.

- **Gloves**: Wear chemical resistant protective gloves.

- **General**: Follow company-specific safety procedures.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**: Clear, pink liquid
- **pH**: 9 (approximate)
- **Odor**: Not available
- **Solubility**: Water-soluble
- **Specific Gravity**: 1.08 (approximate)
- **Vapor Pressure**: Not available
- **Boiling Point**: Not available
- **Partition Coefficient (n-octanol/water)**: Not available
- **Melting Point**: Not applicable
- **Vapor Density**: Not available
- **Freezing Point**: Not available
- **Chemical Family**: Alkaline solution
10. STABILITY AND REACTIVITY

Chemical Stability:
Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

Conditions to Avoid:
Solution is oxidized by air. Avoid high temperatures.

Incompatible Materials:
Avoid amines, ammonium salts, cyanides and reducing agents. Heat and acids will result in release of nitrous gas.
Under certain conditions, nitrite compounds may react with secondary and tertiary amines to form nitrosamines, which are known carcinogens in animals.

Hazardous Decomposition Products:
Thermal decomposition may lead to release of irritating gases and vapors.

Possibility of Hazardous Reactions:
Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects:
Toxic by ingestion. Harmful by inhalation and in contact with skin. May cause severe eye irritation. Sodium nitrite exposure may result in a drop in blood pressure, headache, vertigo, palpitations, visual disturbances, methemoglobinemia, dyspnea and respiratory depression.

Toxicology Data - Selected LD50s and LC50s
Sodium nitrite 7632-00-0 Inhalation LC50 Rat: 5500 µg/m3/4H; Oral LD50 Rat: 88 mg/kg

Chronic Effects:
No data available.

Carcinogenicity:
No data available.

Mutagenicity:
No data available.

Teratogenicity:
No data available.

Reproductive Effects:
No data available.

Sensitization:
No data available.

12. ECOLOGICAL INFORMATION
MATERIAL SAFETY DATA SHEET
OSOM® Ultra Strep A Extraction Reagent A

Ecotoxicity:
Ecotoxicity - Freshwater Fish Species Data
Sodium nitrite 7632-00-0 96 Hr LC50 Oncorhynchus mykiss: 0.19 mg/L [flow-through] (juvenile)

Persistence and Degradability:
No data available.

Bioaccumulative Potential:
No data available.

Mobility in Environmental Media:
No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:
Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Waste Classification:
U.S. - California - 22 CCR - Presumed Hazardous Wastes
Sodium nitrite 7632-00-0 Toxic; Ignitable; Reactive

14. TRANSPORT INFORMATION

Basic Shipping Description:
International Air Transport Association (IATA) Dangerous Goods Classification
UN Number: UN 3316
Proper Shipping Name: Chemical Kit
Hazard Class: 9
Hazard Label: Miscellaneous
Packing Group: PG III
Packaging Instruction: Y915
Special Provisions: A44 (excepted quantities)

U.S. Department of Transportation (DOT)
Consumer Commodity, ORM-D

15. REGULATORY INFORMATION

US Federal Regulations:
This preparation is a component of an FDA-regulated in vitro diagnostic device.

Inventory - United States - Section 8(b) Inventory (TSCA)
Sodium nitrite 7632-00-0 Present

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Sodium nitrite 7632-00-0 100 lb final RQ; 45.4 kg final RQ

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
Sodium nitrite 7632-00-0 1.0 % de minimis concentration

US State Regulations:
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances
Sodium nitrite 7632-00-0 Present
MATERIAL SAFETY DATA SHEET
OSOM® Ultra Strep A Extraction Reagent A

International Regulations:
If approved for European Communities use, this product is regulated under the In Vitro Diagnostic Medical Devices Directive (98/79/EC).

Canada - WHMIS - Ingredient Disclosure List
Sodium nitrite 7632-00-0 1 %

EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Classification
Sodium nitrite 7632-00-0 O;R8 T;R25 N;R50

EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Concentration Limits
Sodium nitrite 7632-00-0 25%<=C: T,N; R25-50 5%<=C<25%: T; R25 1%<=C<5%: Xn; R22

Sodium nitrite 7632-00-0 S:1/2-45-61

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes
Sodium nitrite 7632-00-0 ID Number 161, hazard class 2 - hazard to waters

Inventory - Australia - Inventory of Chemical Substances (AICS)
Sodium nitrite 7632-00-0 Present

Inventory - Canada - Domestic Substances List (DSL)
Sodium nitrite 7632-00-0 Present

Inventory - China
Sodium nitrite 7632-00-0 Present

Inventory - European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)
Sodium nitrite 7632-00-0 231-555-9

Inventory - Japan Existing and New Chemical Substances (ENCS)
Sodium nitrite 7632-00-0 1-483

Inventory - Korea - Existing and Evaluated Chemical Substances
Sodium nitrite 7632-00-0 KE-31546

Canadian Hazardous Products:

WHMIS Status Controlled
Classification D2B - Other Toxic Effects-TOXIC

European Communities Dangerous Substances/Preparations:
EC Hazard Class T - Toxic

Symbols

Risk Phrases
R25 Toxic if swallowed.

Safety Phrases
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/39 Wear suitable protective clothing and eye/face protection.
S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. OTHER INFORMATION
Further Information:
This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the U.S. OSHA Hazard Communication Standard, Canadian Controlled Products Regulation (CPR), UK Chemical Hazard Information and Packaging Regulations, European Communities REACH Regulation, and UN Globally Harmonized System of Classification and Labelling of Chemicals.

MSDS Origination Date: January 13, 2005
Version #: 5
Revision Date: May 02, 2008

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: OSOM® Ultra Strep A Extraction Reagent B
Synonym(s): Ultra Strep A Extraction Reagent B
Description: Aqueous, acidic solution.

<table>
<thead>
<tr>
<th>Corporate Headquarters</th>
<th>Manufacturer/Distributor</th>
<th>Emergency Telephone Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genzyme Corporation</td>
<td>Genzyme Diagnostics</td>
<td>Genzyme (U.S.): 617-562-4555</td>
</tr>
<tr>
<td>500 Kendall Street</td>
<td>6659 Top Gun Street</td>
<td>CHEMTREC (U.S.): 800-424-9300</td>
</tr>
<tr>
<td>Cambridge, MA 02142</td>
<td>San Diego, CA 92121</td>
<td>CHEMTREC (Outside U.S.): 703-527-3887</td>
</tr>
<tr>
<td>USA</td>
<td>USA</td>
<td></td>
</tr>
<tr>
<td>Phone: 617-252-7500</td>
<td>Phone: 858-452-3198</td>
<td></td>
</tr>
</tbody>
</table>

2. HAZARDS IDENTIFICATION

Precautionary Statements:
The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Irritating to the eyes. May be irritating to skin and respiratory system. Avoid contact with eyes and skin. Do not ingest or inhale. Preparation appearance: clear, colorless liquid.

Routes of Exposure:
Occupational exposure routes may include inhalation, eye and skin contact.

Potential Health Effects:
- **Inhalation**: Inhalation may be irritating to the nasal passages and throat.
- **Eye**: Eye exposure will cause immediate irritation, redness and pain.
- **Skin**: Prolonged skin contact may cause skin irritation with discomfort and rash.
- **Ingestion**: If large amounts are ingested, symptoms may include digestive irritation and discomfort.
- **Chronic Effects**: Prolonged or repeated skin contact may cause chronic irritation.
- **Target Organs**: Eyes and skin.

Regulatory Status:

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Potential Environmental Effects:
None expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>EC #</th>
<th>% (wt/wt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>98 - 99</td>
</tr>
</tbody>
</table>

EC R-Phrases: None
EC Hazard Class: None

Date Printed: May 02, 2008
Effective Date: May 02, 2008
4. FIRST AID MEASURES

Inhalation:
If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact:
Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain immediate medical attention.

Skin Contact:
In case of contact, flush skin with cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion:
In case of ingestion, contact a poison control center or physician for instructions.

5. FIRE FIGHTING MEASURES

Flammable Properties:
Dilute aqueous solution not considered a fire hazard.

Suitable Extinguishing Media:
Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Unsuitable Extinguishing Media:
Unknown.

Specific Hazards Arising from the Chemical:
When heated to decomposition, may produce carbon dioxide (CO2) and carbon monoxide (CO).

Standard Protective Equipment and Precautions for Firefighters:
Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Avoid physical contact with material and avoid aerosol inhalation. Ensure adequate ventilation. Wear Personal Protective Equipment (PPE) as indicated in Section 8. Wash hands thoroughly after handling.

Environmental Precautions:
No special environmental precautions required.

Methods and Materials for Containment and Clean-Up:
Absorb spill with inert material/sorbent or appropriate neutralizing agent. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.
7. HANDLING AND STORAGE

Handling:
Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Mixing Strep A Extraction Reagents A and B yields nitrous acid, which may immediately decompose into toxic nitrous gas, a short-term reaction by-product. Minimize contact and contamination of personal clothing and skin. Avoid vapor or aerosol inhalation. Wash hands thoroughly after handling.

Storage:
Store at 15 to 30°C (59 to 86°F). Keep container tightly closed. Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

<table>
<thead>
<tr>
<th>Region / Standard</th>
<th>Substance</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH - TLV-STEL</td>
<td>Acetic acid</td>
<td>64-19-7 15 ppm STEL</td>
</tr>
<tr>
<td>ACGIH - TLV-TWA</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm TWA</td>
</tr>
<tr>
<td>Australia - STELs</td>
<td>Acetic acid</td>
<td>64-19-7 15 ppm STEL; 37 mg/m³ STEL</td>
</tr>
<tr>
<td>Australia - TWA</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm TWA; 25 mg/m³ TWA</td>
</tr>
<tr>
<td>Canada - STELs</td>
<td>Acetic acid</td>
<td>64-19-7 15 ppm STEV; 37 mg/m³ STEV</td>
</tr>
<tr>
<td>Canada - TWA</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm TWA</td>
</tr>
<tr>
<td>China - STELs</td>
<td>Acetic acid</td>
<td>64-19-7 20 mg/m³ STEL</td>
</tr>
<tr>
<td>China - TWA</td>
<td>Acetic acid</td>
<td>64-19-7 10 mg/m³ TWA</td>
</tr>
<tr>
<td>EU - IOELV-TWA</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm TWA; 25 mg/m³ TWA</td>
</tr>
<tr>
<td>Israel - STELs</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm TWA; 25 mg/m³ TWA</td>
</tr>
<tr>
<td>Israel - TWA</td>
<td>Acetic acid</td>
<td>64-19-7 15 ppm STEL</td>
</tr>
<tr>
<td>Japan - TWA</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm OEL; 25 mg/m³ OEL</td>
</tr>
<tr>
<td>Korea - STELs</td>
<td>Acetic acid</td>
<td>64-19-7 15 ppm STEL; 37 mg/m³ STEL</td>
</tr>
<tr>
<td>Korea - TWA</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm TWA; 25 mg/m³ TWA</td>
</tr>
<tr>
<td>U.S. - Final PELs</td>
<td>Acetic acid</td>
<td>64-19-7 10 ppm TWA; 25 mg/m³ TWA</td>
</tr>
</tbody>
</table>

Engineering Controls:
Provide adequate ventilation by means of mechanical exhaust, to keep airborne concentrations low. Facilities storing or using this preparation should be equipped with an eyewash fountain.

Personal Protective Equipment (PPE):

Respiratory
A respiratory protection program that meets U.S. Federal OSHA 29 CFR 1910.134 and ANSI Z99.2, Canadian CSA Standard Z94.4-93, European Standard EN 529, or other applicable regulatory standards must be followed whenever exposure limits may be exceeded (if applicable), engineering controls are not feasible, or if insufficient ventilation or workplace conditions warrant respirator use. In such cases an air purifying respirator equipped with an organic vapor/acid gas cartridge is recommended.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Clear, colorless liquid</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>2.6 (approximate)</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Sour, pungent odor like vinegar</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Water-soluble</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Partition Coefficient</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Freezing Point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Chemical Family:** Acidic solution

**Flammability/Explosivity Limits in Air, Lower:** Not available

**Flammability/Explosivity Limits in Air, Upper:** Not available

**Auto-Ignition Temperature:** Not available

**Flash Point:** Not available

10. STABILITY AND REACTIVITY

**Chemical Stability:**
Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

**Conditions to Avoid:**
None known.

**Incompatible Materials:**
Avoid strong oxidizing agents, most common metals (except aluminum), strong bases and amines.

**Hazardous Decomposition Products:**
Thermal decomposition may lead to release of irritating gases and vapors.

**Possibility of Hazardous Reactions:**
Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

**Acute Effects:**

**Toxicology Data - Selected LD50s and LC50s**

<table>
<thead>
<tr>
<th>Substance</th>
<th>LD50/LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetic acid</td>
<td>Oral LD50 Rat: 3310 mg/kg; Dermal LD50 Rabbit: 1060 mg/kg; Inhalation LC50 Rat: 11.4 mg/L/1H</td>
</tr>
</tbody>
</table>

**Local Effects:**
Causes eye irritation and may cause skin and respiratory tract irritation.
Chronic Effects:
Prolonged or repeated skin contact may cause dermatitis.

Carcinogenicity:
None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Mutagenicity:
No data available.

Teratogenicity:
No data available.

Reproductive Effects:
No data available.

Sensitization:
No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Ecotoxicity - Freshwater Fish Species Data
Acetic acid 64-19-7 96 Hr LC50 Pimephales promelas: 88 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 75 mg/L

Ecotoxicity - Microtox Data
Acetic acid 64-19-7 5 min EC50 Photobacterium phosphoreum: 8.8 mg/L; 15 min EC50 Photobacterium phosphoreum: 8.8 mg/L; 25 min EC50 Photobacterium phosphoreum: 8.8 mg/L

Ecotoxicity - Water Flea Data
Acetic acid 64-19-7 24 Hr EC50 Daphnia magna: 95 mg/L

Persistence and Degradability:
No data available.

Bioaccumulative Potential:
No data available.

Mobility in Environmental Media:
No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:
Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Waste Classification:
U.S. - California - 22 CCR - Presumed Hazardous Wastes
Acetic acid 64-19-7 Toxic; Corrosive; Ignitable

14. TRANSPORT INFORMATION
Basic Shipping Description:
International Air Transport Association (IATA) Dangerous Goods Classification
UN Number: UN 3316
Proper Shipping Name: Chemical Kit
Hazard Class: 9
Hazard Label: Miscellaneous
Packing Group: PG III
Packaging Instruction: Y915
Special Provisions: A44 (excepted quantities)

U.S. Department of Transportation (DOT)
Consumer Commodity, ORM-D

15. REGULATORY INFORMATION

US Federal Regulations:
This preparation is a component of an FDA-regulated in vitro diagnostic device.

Inventory - United States - Section 8(b) Inventory (TSCA)
Acetic acid 64-19-7 Present

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Acetic acid 64-19-7 5000 lb final RQ; 2270 kg final RQ

US State Regulations:
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances
Acetic acid 64-19-7 Present (exempt in solutions of less than 10% or when present in food or beverages)
MATERIAL SAFETY DATA SHEET
OSOM® Ultra Strep A Extraction Reagent B

International Regulations:
If approved for European Communities use, this product is regulated under the In Vitro Diagnostic Medical Devices Directive (98/79/EC).

Canada - WHMIS - Classifications of Substances

Acetic acid 64-19-7 B3, E (including 56%, 80%, 84%, 92%); E (30%, 36%); D2B (3%)

Canada - WHMIS - Ingredient Disclosure List

Acetic acid 64-19-7 1 %

EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Classification

Acetic acid 64-19-7 R10 C; R35

EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Concentration Limits

Acetic acid 64-19-7 90%<=C: C; R35 25%<=C<90%: C; R34 10%<=C<25%: Xi; R36/38


Acetic acid 64-19-7 S:1/2-23-26-45

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes

Acetic acid 64-19-7 ID Number 93, hazard class 1 - low hazard to waters

Inventory - Australia - Inventory of Chemical Substances (AICS)

Acetic acid 64-19-7 Present

Inventory - Canada - Domestic Substances List (DSL)

Acetic acid 64-19-7 Present

Inventory - Canada - Non-Domestic Substances List (NDSL)

Acetic acid 64-19-7 Present

Inventory - China

Acetic acid 64-19-7 Present

Inventory - European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

Acetic acid 64-19-7 Present

Inventory - Japan Existing and New Chemical Substances (ENCS)

Acetic acid 64-19-7 Present

Inventory - Korea - Existing and Evaluated Chemical Substances

Acetic acid 64-19-7 KE-00013

Canadian Hazardous Products:

WHMIS Status Controlled

Classification E - Corrosive

European Communities Dangerous Substances/Preparations:

EC Hazard Class Exempt

Risk Phrases None

Safety Phrases None

16. OTHER INFORMATION

Further Information:
This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the U.S. OSHA Hazard Communication Standard, Canadian Controlled Products Regulation (CPR), UK Chemical Hazard Information and Packaging Regulations, European Communities REACH Regulation, and UN Globally Harmonized System of Classification and Labelling of Chemicals.
MSDS Origination Date: January 13, 2005
Version #: 4
Revision Date: May 02, 2008

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1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: OSOM® Strep A Positive Control

Synonym(s): Strep A Positive Control; Ultra Strep A Positive Control

Product Use: For In Vitro Diagnostic Use Only. Component of OSOM® Strep A Test kit (catalog # 141 & 141E) and OSOM® Ultra Strep A Test kit (catalog # 147 & 149). For external quality control testing.

Description: Aqueous solution containing heat-inactivated bacteria and preservative.

Corporate Headquarters
Genzyme Corporation
500 Kendall Street
Cambridge, MA 02142
USA
Phone: 617-252-7500

Manufacturer/Distributor
Genzyme Diagnostics
6659 Top Gun Street
San Diego, CA 92121
USA
Phone: 858-452-3198

Distributor
Genzyme Diagnostics
50 Gibson Drive
Kings Hill, West Malling
Kent, ME19 4AF
UK
Phone: 44 (0) 1732 220022

Emergency Telephone Numbers
Genzyme (U.S.): 617-562-4555
CHEMTREC (U.S.): 800-424-9300
CHEMTREC (Outside U.S.): 703-527-3887

2. HAZARDS IDENTIFICATION

Precautionary Statements:
CAUTION! The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Avoid contact with eyes and skin. Do not ingest or inhale. Harmful by ingestion. Preparation appearance: clear, colorless liquid.

Routes of Exposure:
Occupational exposure routes may include eye contact, skin contact and skin absorption.

Potential Health Effects:

Inhalation
Aerosol inhalation may cause coughing and sore throat.

Eye
Eye exposure may cause irritation, redness and watering.

Skin
Skin contact may cause irritation, dryness and redness. Sodium azide may be absorbed through the skin and result in systemic effects.

Ingestion
Ingestion of sodium azide may cause nausea, diarrhea, vomiting, headache, slight lowering of blood pressure, abdominal pain, and a general feeling of apprehension and unwellness.

Chronic Effects
No data available.

Target Organs
Sodium azide: Cardiovascular and central nervous system.
MATERIAL SAFETY DATA SHEET
OSOM® Strep A Positive Control

Regulatory Status:

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Potential Environmental Effects:
Unknown.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>EC #</th>
<th>% (wt/wt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>93 - 96</td>
</tr>
<tr>
<td>Non-viable Group A Streptococci</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>247-852-1</td>
<td>0.1</td>
</tr>
<tr>
<td>EC R-Phrases: None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC Hazard Class: None</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation:
If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact:
Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain medical attention if needed or if symptoms, such as redness or irritation persist.

Skin Contact:
In case of contact, flush skin with copious amounts of cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion:
In case of ingestion, contact a poison control center or physician for instructions.

5. FIRE FIGHTING MEASURES

Flammable Properties:
Dilute aqueous solution not considered a fire hazard.

Suitable Extinguishing Media:
Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Unsuitable Extinguishing Media:
Unknown.

Specific Hazards Arising from the Chemical:
When heated to decomposition, may produce hydrazoic acid fumes.
MATERIAL SAFETY DATA SHEET
OSOM® Strep A Positive Control

Standard Protective Equipment and Precautions for Firefighters:
Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material. Wash hands thoroughly after handling.

Environmental Precautions:
This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. Follow proper disposal procedures.

Methods and Materials for Containment and Clean-Up:
Absorb spill with inert material/sorbent. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. HANDLING AND STORAGE

Handling:
Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Wash hands thoroughly after handling.

Storage:
Store at 15 to 30°C (59 to 86°F). Keep container tightly closed. Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

<table>
<thead>
<tr>
<th>Region</th>
<th>Limit Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH - Threshold Limits Values - Ceilings (TLV-C)</td>
<td>Sodium azide 26628-22-8 0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (vapor, as hydrazoic acid)</td>
</tr>
<tr>
<td>Canada - Quebec - Occupational Exposure Limits - Ceilings</td>
<td>Sodium azide 26628-22-8 0.11 ppm Ceiling; 0.3 mg/m3 Ceiling</td>
</tr>
<tr>
<td>EU - Occupational Exposure Directive (2006/15/EC) Indicative Occupational Exposure Limit Values (IOELV) - Skin Notations</td>
<td>Sodium azide 26628-22-8 possibility of significant uptake through the skin</td>
</tr>
<tr>
<td>EU - Occupational Exposure Directive (2006/15/EC) Indicative Occupational Exposure Limit Values (IOELV) - STELs</td>
<td>Sodium azide 26628-22-8 0.3 mg/m3 STEL</td>
</tr>
<tr>
<td>EU - Occupational Exposure Directive (2006/15/EC) Indicative Occupational Exposure Limit Values (IOELV) - TWAs</td>
<td>Sodium azide 26628-22-8 0.1 mg/m3 TWA</td>
</tr>
<tr>
<td>Israel - Occupational Exposure Limits - Ceilings</td>
<td>Sodium azide 26628-22-8 0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (vapor, as Hydrazoic acid)</td>
</tr>
<tr>
<td>Korea - Occupational Exposure Limits - Ceilings</td>
<td>Sodium azide 26628-22-8 0.1 ppm Ceiling; 0.3 mg/m3 Ceiling</td>
</tr>
</tbody>
</table>

Engineering Controls:
This preparation is aqueous and non-volatile and is not expected to require special ventilation measures. Facilities storing or using this preparation should be equipped with an eyewash fountain.

Personal Protective Equipment (PPE):

<table>
<thead>
<tr>
<th>Type</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory</td>
<td>A respirator is not required under normal conditions of use.</td>
</tr>
<tr>
<td>Eye/Face</td>
<td>Wear appropriate protective chemical safety glasses.</td>
</tr>
<tr>
<td>Skin</td>
<td>Wear lab coat or other protective garments. Remove contaminated clothing promptly.</td>
</tr>
<tr>
<td>Gloves</td>
<td>Wear chemical resistant protective gloves.</td>
</tr>
</tbody>
</table>

Effective Date: May 02, 2008
Date Printed: May 02, 2008
9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid  
Odor: Not available  
Boiling Point: Not available  
Melting Point: Not applicable  
Freezing Point: Not available  

pH: 7.2 (approximate)  
Solubility: Water-soluble  
Vapor Pressure: Not available  
Partition Coefficient (n-octanol/water): Not available  
Vapor Density: Not available

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).  
Conditions to Avoid: Avoid prolonged exposure to direct sunlight.  
Incompatible Materials: Avoid strong oxidizing agents, acids, heavy metals and their salts.  
Hazardous Decomposition Products: None expected under normal conditions of use.  
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Effects:  
Toxicology Data - Selected LD50s and LC50s  
Sodium azide 26628-22-8 Oral LD50 Rat: 27 mg/kg; Dermal LD50 Rabbit: 20 mg/kg  

Local Effects: No data available.  
Chronic Effects: No data available.  

Carcinogenicity: None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.  

ACGIH - Threshold Limits Values - Carcinogens  
Sodium azide 26628-22-8 A4 - Not Classifiable as a Human Carcinogen  

Canada - Manitoba - Occupational Exposure Limits - Carcinogens  
Sodium azide 26628-22-8 A4 - Not Classifiable as a Human Carcinogen
Mutagenicity:
No data available.

Teratogenicity:
No data available.

Reproductive Effects:
No data available.

Sensitization:
No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Ecotoxicity - Freshwater Fish Species Data
Sodium azide 26628-22-8 96 Hr LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.7 mg/L; 96 Hr LC50 Pimephales promelas: 5.46 mg/L [flow-through]

Persistence and Degradability:
No data available.

Bioaccumulative Potential:
No data available.

Mobility in Environmental Media:
No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:
This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. If preparation enters drain, flush with a large volume of water to prevent azide build-up. Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Waste Classification:
U.S. - California - 22 CCR - Presumed Hazardous Wastes
Sodium azide 26628-22-8 Ignitable; Reactive

U.S. - RCRA (Resource Conservation & Recovery Act) - P Series Wastes - Acutely Toxic Wastes
Sodium azide 26628-22-8 waste number P105

14. TRANSPORT INFORMATION
Basic Shipping Description:
International Air Transport Association (IATA) Dangerous Goods Classification
UN Number: UN 3316
Proper Shipping Name: Chemical Kit
Hazard Class: 9
Hazard Label: Miscellaneous
Packing Group: PG III
Packaging Instruction: Y915
Special Provisions: A44 (excepted quantities)

U.S. Department of Transportation (DOT)
Consumer Commodity, ORM-D

15. REGULATORY INFORMATION

US Federal Regulations:
This preparation is a component of an FDA-regulated in vitro diagnostic device.

Inventory - United States - Section 8(b) Inventory (TSCA)
Sodium azide 26628-22-8 Present

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Sodium azide 26628-22-8 1000 lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs
Sodium azide 26628-22-8 1000 lb EPCRA RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Sodium azide 26628-22-8 500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solvent form)

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
Sodium azide 26628-22-8 1.0 % de minimis concentration

US State Regulations:
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances
Sodium azide 26628-22-8 Present
International Regulations:
If approved for European Communities use, this product is regulated under the In Vitro Diagnostic Medical Devices Directive (98/79/EC).

Canada - WHMIS - Classifications of Substances
- Sodium azide (26628-22-8) - D1A

Canada - WHMIS - Ingredient Disclosure List
- Sodium azide (26628-22-8) - 1%

EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Classification
- Sodium azide (26628-22-8) - T+; R28 R32 N; R50-53

- Sodium azide (26628-22-8) - S:1/2-28-45-60-61

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes
- Sodium azide (26628-22-8) - ID Number 636, hazard class 2 - hazard to waters

Inventory - Australia - Inventory of Chemical Substances (AICS)
- Sodium azide (26628-22-8) - Present

Inventory - Canada - Domestic Substances List (DSL)
- Sodium azide (26628-22-8) - Present

Inventory - China
- Sodium azide (26628-22-8) - Present

Inventory - European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)
- Sodium azide (26628-22-8) - 247-852-1

Inventory - Japan Existing and New Chemical Substances (ENCS)
- Sodium azide (26628-22-8) - 1-482

Inventory - Korea - Existing and Evaluated Chemical Substances
- Sodium azide (26628-22-8) - KE-31357

Canadian Hazardous Products:
- WHMIS Status: Non-controlled

European Communities Dangerous Substances/Preparations:
- EC Hazard Class: Xn - Harmful
- Symbols: 
- Risk Phrases: R22 - Harmful if swallowed, R32 - Contact with acids liberates very toxic gas.
- Safety Phrases: S35 - This material and its container must be disposed of in a safe way.

16. OTHER INFORMATION

Recommended Use:
For In Vitro Diagnostic Use Only. Not for human or drug use.

Further Information:
This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the U.S. OSHA Hazard Communication Standard, Canadian Controlled Products Regulation (CPR), UK Chemical Hazard Information and Packaging Regulations, European Communities REACH Regulation, and UN Globally Harmonized System of Classification and Labelling of Chemicals.
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MATERIAL SAFETY DATA SHEET
OSOM® Strep A Negative Control

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: OSOM® Strep A Negative Control

Synonym(s): Strep A Negative Control; Ultra Strep A Negative Control

Product Use: For In Vitro Diagnostic Use Only. Component of OSOM® Strep A Test kit (catalog # 141 & 141E) and OSOM® Ultra Strep A Test kit (catalog # 147 & 149). For external quality control testing.

Description: Aqueous solution containing heat-inactivated bacteria and preservative.

Corporate Headquarters
Genzyme Corporation
500 Kendall Street
Cambridge, MA 02142
USA
Phone: 617-252-7500

Manufacturer/Distributor
Genzyme Diagnostics
6659 Top Gun Street
San Diego, CA 92121
USA
Phone: 858-452-3198

Emergency Telephone Numbers
Genzyme (U.S.): 617-562-4555
CHEMTREC (U.S.): 800-424-9300
CHEMTREC (Outside U.S.): 703-527-3887

Distributor
Genzyme Diagnostics
50 Gibson Drive
Kings Hill, West Malling
Kent, ME19 4AF
UK
Phone: 44 (0) 1732 220022

2. HAZARDS IDENTIFICATION

Precautionary Statements:
CAUTION! The chemical, physical and toxicological properties of this preparation have not been thoroughly characterized. Avoid contact with eyes and skin. Do not ingest or inhale. Harmful by ingestion. Preparation appearance: clear, colorless liquid.

Routes of Exposure:
Occupational exposure routes may include eye contact, skin contact and skin absorption.

Potential Health Effects:

Inhalation
Aerosol inhalation may cause coughing and sore throat.

Eye
Eye exposure may cause irritation, redness and watering.

Skin
Skin contact may cause irritation, dryness and redness. Sodium azide may be absorbed through the skin and result in systemic effects.

Ingestion
Ingestion of sodium azide may cause nausea, diarrhea, vomiting, headache, slight lowering of blood pressure, abdominal pain, and a general feeling of apprehension and unwellness.

Chronic Effects
No data available.

Target Organs
Sodium azide: Cardiovascular and central nervous system.
MATERIAL SAFETY DATA SHEET
OSOM® Strep A Negative Control

Regulatory Status:

None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Potential Environmental Effects:
Unknown.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>EC #</th>
<th>% (wt/wt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>93 - 96</td>
</tr>
<tr>
<td>Non-viable Group C Streptococci</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>247-852-1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

EC R-Phrases: None
EC Hazard Class: None

4. FIRST AID MEASURES

Inhalation:
If inhaled, move from exposure area to fresh air. Seek medical attention if breathing becomes difficult or if cough or other symptoms develop.

Eye Contact:
Immediately flush eyes with plenty of tepid water for 15 minutes while separating eyelids with fingers. Remove contact lenses if worn. Obtain medical attention if needed or if symptoms, such as redness or irritation persist.

Skin Contact:
In case of contact, flush skin with copious amounts of cool water and remove contaminated clothing. Obtain medical attention if needed or if irritation or other symptoms develop.

Ingestion:
In case of ingestion, contact a poison control center or physician for instructions.

5. FIRE FIGHTING MEASURES

Flammable Properties:
Dilute aqueous solution not considered a fire hazard.

Suitable Extinguishing Media:
Use extinguishing media suitable for surrounding fire, such as carbon dioxide, chemical foam, dry chemical or water spray.

Unsuitable Extinguishing Media:
Unknown.

Specific Hazards Arising from the Chemical:
When heated to decomposition, may produce hydrazoic acid fumes.
OSOM® Strep A Negative Control

MATERIAL SAFETY DATA SHEET

Standard Protective Equipment and Precautions for Firefighters:
Firefighters should wear NIOSH-approved or equivalent Self-Contained Breathing Apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:
Wear Personal Protective Equipment (PPE) as indicated in Section 8. Avoid physical contact with material. Wash hands thoroughly after handling.

Environmental Precautions:
This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. Follow proper disposal procedures.

Methods and Materials for Containment and Clean-Up:
Absorb spill with inert material/sorbent. Decontaminate the spill site following standard procedures. Dispose of materials in accordance with all applicable federal, state, local and provincial environmental regulations, per Section 13.

7. HANDLING AND STORAGE

Handling:
Follow good laboratory hygiene practices. See Section 8, Engineering Controls. Minimize contact and contamination of personal clothing and skin. Wash hands thoroughly after handling.

Storage:
Store at 15 to 30°C (59 to 86°F). Keep container tightly closed. Do not store with incompatible substances; see Section 10.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

ACGIH - Threshold Limits Values - Ceilings (TLV-C)
Sodium azide 26628-22-8 0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (vapor, as hydrazoic acid)

Canada - Quebec - Occupational Exposure Limits - Ceilings
Sodium azide 26628-22-8 0.11 ppm Ceiling; 0.3 mg/m3 Ceiling

EU - Occupational Exposure Directive (2006/15/EC) Indicative Occupational Exposure Limit Values (IOELV) - Skin Notations
Sodium azide 26628-22-8 possibility of significant uptake through the skin

EU - Occupational Exposure Directive (2006/15/EC) Indicative Occupational Exposure Limit Values (IOELV) - STELs
Sodium azide 26628-22-8 0.3 mg/m3 STEL

EU - Occupational Exposure Directive (2006/15/EC) Indicative Occupational Exposure Limit Values (IOELV) - TWAs
Sodium azide 26628-22-8 0.1 mg/m3 TWA

Israel - Occupational Exposure Limits - Ceilings
Sodium azide 26628-22-8 0.29 mg/m3 Ceiling (as NaN3); 0.11 ppm Ceiling (vapor, as Hydrazoic acid)

Korea - Occupational Exposure Limits - Ceilings
Sodium azide 26628-22-8 0.1 ppm Ceiling; 0.3 mg/m3 Ceiling

Engineering Controls:
This preparation is aqueous and non-volatile and is not expected to require special ventilation measures. Facilities storing or using this preparation should be equipped with an eyewash fountain.

Personal Protective Equipment (PPE):

Respiratory
A respirator is not required under normal conditions of use.

Eye/Face
Wear appropriate protective chemical safety glasses.

Skin
Wear lab coat or other protective garments. Remove contaminated clothing promptly.

Gloves
Wear chemical resistant protective gloves.
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Clear, colorless liquid</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Freezing Point</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>7.2 (approximate)</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Water-soluble</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Partition Coefficient</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Chemical Stability:**
Stable under ordinary conditions of use and storage; (see handling and storage information in Section 7).

**Conditions to Avoid:**
Avoid prolonged exposure to direct sunlight.

**Incompatible Materials:**
Avoid strong oxidizing agents, acids, heavy metals and their salts.

**Hazardous Decomposition Products:**
None expected under normal conditions of use.

**Possibility of Hazardous Reactions:**
Hazardous polymerization will not occur.

### 11. TOXICOLOGICAL INFORMATION

**Acute Effects:**

<table>
<thead>
<tr>
<th>Toxicology Data - Selected LD50s and LC50s</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
</tr>
<tr>
<td>Oral LD50 Rat</td>
<td>27 mg/kg</td>
</tr>
<tr>
<td>Dermal LD50 Rabbit</td>
<td>20 mg/kg</td>
</tr>
</tbody>
</table>

**Local Effects:**
No data available.

**Chronic Effects:**
No data available.

**Carcinogenicity:**
None of the components present in this preparation at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

**ACGIH - Threshold Limits Values - Carcinogens**

<table>
<thead>
<tr>
<th>Substance</th>
<th>Value</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium azide</td>
<td>26628-22-8</td>
<td>A4 - Not Classifiable as a Human Carcinogen</td>
</tr>
</tbody>
</table>

**Canada - Manitoba - Occupational Exposure Limits - Carcinogens**

<table>
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</tr>
</tbody>
</table>

Effective Date: May 02, 2008
Date Printed: May 02, 2008
Mutagenicity:
No data available.

Teratogenicity:
No data available.

Reproductive Effects:
No data available.

Sensitization:
No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Ecotoxicity - Freshwater Fish Species Data
Sodium azide 26628-22-8 96 Hr LC50 Oncorhynchus mykiss: 0.8 mg/L; 96 Hr LC50 Lepomis macrochirus: 0.7 mg/L; 96 Hr LC50 Pimephales promelas: 5.46 mg/L [flow-through]

Persistance and Degradability:
No data available.

Bioaccumulative Potential:
No data available.

Mobility in Environmental Media:
No data available.

13. DISPOSAL CONSIDERATIONS

Methods of Disposal:
This preparation contains a small amount of sodium azide which can react with copper, lead, brass or solder in plumbing systems and form potentially explosive metal azides. If preparation enters drain, flush with a large volume of water to prevent azide build-up. Dispose of unused product, spilled material and waste in accordance with all applicable federal, state, local and provincial environmental and hazardous waste regulations.

Waste Classification:
U.S. - California - 22 CCR - Presumed Hazardous Wastes
Sodium azide 26628-22-8 Ignitable; Reactive

U.S. - RCRA (Resource Conservation & Recovery Act) - P Series Wastes - Acutely Toxic Wastes
Sodium azide 26628-22-8 waste number P105

14. TRANSPORT INFORMATION
MATERIAL SAFETY DATA SHEET
OSOM® Strep A Negative Control

Basic Shipping Description:
International Air Transport Association (IATA) Dangerous Goods Classification
UN Number: UN 3316
Proper Shipping Name: Chemical Kit
Hazard Class: 9
Hazard Label: Miscellaneous
Packing Group: PG III
Packaging Instruction: Y915
Special Provisions: A44 (excepted quantities)

U.S. Department of Transportation (DOT)
Consumer Commodity, ORM-D

US Federal Regulations:
This preparation is a component of an FDA-regulated in vitro diagnostic device.

Inventory - United States - Section 8(b) Inventory (TSCA)
Sodium azide 26628-22-8 Present

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities
Sodium azide 26628-22-8 1000 lb final RQ; 454 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs
Sodium azide 26628-22-8 1000 lb EPCRA RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Sodium azide 26628-22-8 500 lb TPQ (This material is a reactive solid. The TPQ does not default to 10000 pounds for non-powder, non-molten, non-solvent form)

U.S. - CERCLA/SARA - Section 313 - Emission Reporting
Sodium azide 26628-22-8 1.0 % de minimis concentration

US State Regulations:
U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances
Sodium azide 26628-22-8 Present
International Regulations:
If approved for European Communities use, this product is regulated under the In Vitro Diagnostic Medical Devices Directive (98/79/EC).

Canada - WHMIS - Classifications of Substances
Sodium azide 26628-22-8 D1A

Canada - WHMIS - Ingredient Disclosure List
Sodium azide 26628-22-8 1 %

EU - Dangerous Substances Directive (67/548/EEC) - Annex I - Classification
Sodium azide 26628-22-8 T+:R28 R32 N;R50-53

Sodium azide 26628-22-8 S:1/2-28-45-60-61

Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes
Sodium azide 26628-22-8 ID Number 636, hazard class 2 - hazard to waters

Inventory - Australia - Inventory of Chemical Substances (AICS)
Sodium azide 26628-22-8 Present

Inventory - Canada - Domestic Substances List (DSL)
Sodium azide 26628-22-8 Present

Inventory - China
Sodium azide 26628-22-8 Present

Inventory - European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)
Sodium azide 26628-22-8 247-852-1

Inventory - Japan Existing and New Chemical Substances (ENCS)
Sodium azide 26628-22-8 1-482

Inventory - Korea - Existing and Evaluated Chemical Substances
Sodium azide 26628-22-8 KE-31357

Canadian Hazardous Products:
WHMIS Status Non-controlled

European Communities Dangerous Substances/Preparations:
EC Hazard Class Xn - Harmful
Symbols

Risk Phrases
R22 Harmful if swallowed.
R32 Contact with acids liberates very toxic gas.

Safety Phrases
S35 This material and its container must be disposed of in a safe way.

16. OTHER INFORMATION

Recommended Use:
For In Vitro Diagnostic Use Only. Not for human or drug use.

Further Information:
This MSDS has been prepared in accordance with the ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the U.S. OSHA Hazard Communication Standard, Canadian Controlled Products Regulation (CPR), UK Chemical Hazard Information and Packaging Regulations, European Communities REACH Regulation, and UN Globally Harmonized System of Classification and Labelling of Chemicals.
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