Protein Detector
Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Date of Issue: 07/24/2017
Version: B

SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: Protein Detector
Product Code: CSI002

1.2. Intended Use of the Product
Use of the Substance/Mixture: Ensure cleaning efficacy of enzymatic detergents by turning residual proteins blue

1.3. Name, Address, and Telephone of the Responsible Party
Company
Case Medical Inc.
19 Empire Blvd
South Hackensack, NJ 07606
201-313-1999
www.casemed.com
info@casemed.com

1.4. Emergency Telephone Number
Emergency Number: For Hazardous Materials [or Dangerous Goods] Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at CHEMTREC®, USA & CANADA: 001 (800) 424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
GHS-US Classification
Met. Corr. 1 H290
Acute Tox. 4 (Oral) H302
Skin Corr. 1B H314
Eye Dam. 1 H318
STOT SE 2 H371

2.2. Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US):

Signal Word (GHS-US): Danger
Hazard Statements (GHS-US):
H290 - May be corrosive to metals.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H371 - May cause damage to organs.

Precautionary Statements (GHS-US):
P234 - Keep only in original container.
P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position
comfortable for breathing.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.
P321 - Specific treatment (see section 4 on this SDS).
P330 - Rinse mouth.
P363 - Wash contaminated clothing before reuse.
P390 - Absorb spillage to prevent material damage.
P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards
Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)
No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product Identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methyl alcohol</td>
<td>(CAS-No.) 67-56-1</td>
<td>1-10</td>
<td>Flam. Liq. 2, H225, Acute Tox. 3 (Oral), H301, Acute Tox. 3 (Dermal), H311, Acute Tox. 3 (Inhalation:vapor), H331, STOT SE 1, H370</td>
</tr>
</tbody>
</table>

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures
First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.
First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor.
First-aid Measures After Eye Contact: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed
Symptoms/Injuries: Harmful if swallowed. Causes severe skin burns and eye damage. May cause damage to organs (optic nerve, central nervous system).
Symptoms/Injuries After Inhalation: May be corrosive to the respiratory tract.
Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical burns.
Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic Symptoms: This material contains methanol, which, when ingested, may cause acidosis and ocular toxicity ranging from diminished visual capacity to complete blindness, and possible death.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.
SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media
Suitable Extinguishing Media: Water spray, dry chemical, foam, carbon dioxide.
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture
Fire Hazard: Not considered flammable but may burn at high temperatures.
Explosion Hazard: Contact with metallic substances may release flammable hydrogen gas.
Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.

5.3. Advice for Firefighters
Precautionary Measures Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Carbon oxides (CO, CO₂).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin, or on clothing.

6.1.1. For Non-Emergency Personnel
Protective Equipment: Use appropriate personal protective equipment (PPE).

6.1.2. For Emergency Personnel
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions
Do not allow uncontrolled discharge of product into the environment.

6.3. Methods and Materials for Containment and Cleaning Up
For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.
Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill. Absorb spillage to prevent material damage. Cautiously neutralize spilled liquid.

6.4. Reference to Other Sections
See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Additional Hazards When Processed: May be corrosive to metals. May release corrosive vapors.
Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin and clothing.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Technical Measures: Comply with applicable regulations.
Storage Conditions: Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in corrosive resistant container with a resistant inner liner. Store in original container or corrosive resistant and/or lined container.
Incompatible Materials: Strong acids, strong bases, strong oxidizers. Metals. May be corrosive to metals.
Packaging materials: Store in corrosive resistant container with a resistant inner liner.

7.3. Specific End Use(s)
Ensure cleaning efficacy of enzymatic detergents by turning residual proteins blue.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).
8.2 Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.


Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosion-proof clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles and face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Physical State: Liquid
Appearance: Clear brown
Odor: Characteristic
Odor Threshold: No data available
pH: 1.5 - 2.5
Evaporation Rate: No data available
Melting Point: No data available
Freezing Point: No data available
Boiling Point: > 100 °C (212 °F)
Flash Point: No data available
Auto-ignition Temperature: No data available
Decomposition Temperature: No data available
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Flammability (solid, gas): No data available
Vapor Pressure: No data available
Relative Vapor Density at 20°C: No data available
Relative Density: No data available
Solubility: Water: Soluble
Partition Coefficient: N-Octanol/Water: No data available
Viscosity: No data available

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas. May react exothermically with water releasing heat. Adding an acid to a base or base to an acid may cause a violent reaction.
10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.
10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers. Metals. May be corrosive to metals.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects
Acute Toxicity: Oral: Harmful if swallowed.

<table>
<thead>
<tr>
<th>Protein Detector</th>
<th>ATE (Oral)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,772.13 mg/kg body weight</td>
</tr>
</tbody>
</table>

Phosphoric acid (7664-38-2)

<table>
<thead>
<tr>
<th>LD50 Oral Rat</th>
<th>1530 mg/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 Dermal Rabbit</td>
<td>2740 mg/kg</td>
</tr>
<tr>
<td>LC50 Inhalation Rat</td>
<td>&gt; 850 mg/m³ (Exposure time: 1 h)</td>
</tr>
</tbody>
</table>

Methyl alcohol (67-56-1)

<table>
<thead>
<tr>
<th>LC50 Inhalation Rat</th>
<th>3 mg/l/4h</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 Inhalation Rabbit</td>
<td>22500 ppm (Exposure time: 8 h)</td>
</tr>
<tr>
<td>ATE (Oral)</td>
<td>100.00 mg/kg body weight</td>
</tr>
<tr>
<td>ATE (Dermal)</td>
<td>300.00 mg/kg body weight</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.
  pH: 1.5 - 2.5
Serious Eye Damage/Irritation: Causes serious eye damage.
  pH: 1.5 - 2.5
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): May cause damage to organs.
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Aspiration Hazard: Not classified
Symptoms/Injuries After Inhalation: May be corrosive to the respiratory tract.
Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical burns.
Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.
Chronic Symptoms: This material contains methanol, which, when ingested, may cause acidosis and ocular toxicity ranging from diminished visual capacity to complete blindness, and possible death.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity
Ecology - General: Not classified.

Methyl alcohol (67-56-1)

| LC50 Fish 1       | 28200 mg/l [Exposure time: 96 h - Species: Pimephales promelas [flow-through]] |
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| EC50 Daphnia 1 | 1340 mg/l |
| LC50 Fish 2 | > 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) |

12.2. Persistence and Degradability

| Protein Detector | Persistence and Degradability | Not established. |

12.3. Bioaccumulative Potential

| Protein Detector | Bioaccumulative Potential | Not established. |

<table>
<thead>
<tr>
<th>Methyl alcohol (67-56-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCF Fish 1</td>
</tr>
<tr>
<td>Log Pow</td>
</tr>
</tbody>
</table>

12.4. Mobility in Soil | No additional information available

12.5. Other Adverse Effects

| Other Information | None known. |

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

| Waste Disposal Recommendations | Dispose of contents/container in accordance with local, regional, national, and international regulations. |

| Ecology - Waste Materials | Dispose of waste and residues in accordance with local authority requirements. |

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>PHOSPHORIC ACID SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class</td>
<td>8</td>
</tr>
<tr>
<td>Identification Number</td>
<td>UN1805</td>
</tr>
<tr>
<td>Label Codes</td>
<td>8</td>
</tr>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>ERG Number</td>
<td>154</td>
</tr>
</tbody>
</table>

14.2. In Accordance with IMDG

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>PHOSPHORIC ACID SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Class</td>
<td>8</td>
</tr>
<tr>
<td>Identification Number</td>
<td>UN1805</td>
</tr>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>Label Codes</td>
<td>8</td>
</tr>
<tr>
<td>EmS-No. (Fire)</td>
<td>F-A</td>
</tr>
<tr>
<td>EmS-No. (Spillage)</td>
<td>S-B</td>
</tr>
</tbody>
</table>

14.3. In Accordance with IATA

<table>
<thead>
<tr>
<th>Proper Shipping Name</th>
<th>PHOSPHORIC ACID, SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing Group</td>
<td>III</td>
</tr>
<tr>
<td>Identification Number</td>
<td>UN1805</td>
</tr>
<tr>
<td>Hazard Class</td>
<td>8</td>
</tr>
<tr>
<td>Label Codes</td>
<td>8</td>
</tr>
<tr>
<td>ERG Code (IATA)</td>
<td>8L</td>
</tr>
</tbody>
</table>

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

<table>
<thead>
<tr>
<th>Protein Detector</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
<tr>
<td>Phosphoric acid (7664-38-2)</td>
</tr>
<tr>
<td>CERCLA RQ</td>
</tr>
<tr>
<td>Methyl alcohol (67-56-1)</td>
</tr>
</tbody>
</table>
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Subject to reporting requirements of United States SARA Section 313

<table>
<thead>
<tr>
<th>CERCLA RQ</th>
<th>5000 lb</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 313 - Emission Reporting</td>
<td>1 %</td>
</tr>
</tbody>
</table>

15.2. US State Regulations

Methyl alcohol (67-56-1)

U.S. - California - Proposition 65 - Developmental Toxicity

WARNING: This product contains chemicals known to the State of California to cause birth defects.

Phosphoric acid (7664-38-2)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

Methyl alcohol (67-56-1)

U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision: 07/24/2017
Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 3 (Dermal)</th>
<th>Acute toxicity (dermal) Category 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Tox. 3 (Inhalation:vapor)</td>
<td>Acute toxicity (inhalation:vapor) Category 3</td>
</tr>
<tr>
<td>Acute Tox. 3 (Oral)</td>
<td>Acute toxicity (oral) Category 3</td>
</tr>
<tr>
<td>Acute Tox. 4 (Oral)</td>
<td>Acute toxicity (oral) Category 4</td>
</tr>
<tr>
<td>Aquatic Acute 3</td>
<td>Hazardous to the aquatic environment - Acute Hazard Category 3</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation Category 1</td>
</tr>
<tr>
<td>Flam. Liq. 2</td>
<td>Flammable liquids Category 2</td>
</tr>
<tr>
<td>Met. Corr. 1</td>
<td>Corrosive to metals Category 1</td>
</tr>
<tr>
<td>Skin Corr. 1B</td>
<td>Skin corrosion/irritation Category 1B</td>
</tr>
<tr>
<td>STOT SE 1</td>
<td>Specific target organ toxicity (single exposure) Category 1</td>
</tr>
<tr>
<td>STOT SE 2</td>
<td>Specific target organ toxicity (single exposure) Category 2</td>
</tr>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapor</td>
</tr>
<tr>
<td>H290</td>
<td>May be corrosive to metals</td>
</tr>
<tr>
<td>H301</td>
<td>Toxic if swallowed</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H311</td>
<td>Toxic in contact with skin</td>
</tr>
<tr>
<td>H314</td>
<td>Causes severe skin burns and eye damage</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H331</td>
<td>Toxic if inhaled</td>
</tr>
<tr>
<td>H370</td>
<td>Causes damage to organs</td>
</tr>
<tr>
<td>H371</td>
<td>May cause damage to organs</td>
</tr>
<tr>
<td>H402</td>
<td>Harmful to aquatic life</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)