1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: CS-9300 Potato Wash
Manufacturer: Chemical Systems
Issue Date: September 2012

24 Hour Emergency Number CHEMTREC: 800.424.9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS Number/Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>77-92-9 Citric Acid</td>
<td>PEL: N/A, TLV: N/A</td>
</tr>
</tbody>
</table>

Other Names
2-Hydroxy-1,2,3-propanetricaboxylic Acid

<table>
<thead>
<tr>
<th>CAS Number/Name</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A Proprietary Surfactant Blend</td>
<td>PEL: N/A, TLV: N/A</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

Emergency Overview
May cause burns to the eyes, skin and mucous membrane. May cause permanent eye damage. Inhalation of mist or spray can cause respiratory tract irritation.

Potential Health Effects
Routes of entry: Inhalation, Ingestion, Skin Contact
Target Organs: Eyes, skin, respiratory tract and gastrointestinal tract
Irritancy: Liquid, vapors or mist may be irritating to eyes, skin, and respiratory tract
Sensitizing Capability: None known
Reproductive Effects: None known
Cancer Information: None known

Short Term Exposure (Acute)
Inhalation: Breathing vapor or mist may be irritating to the respiratory tract.
Eyes: Contact of liquid can cause irritation resulting in stinging, reddening and swelling.
Skin: Contact can cause irritation resulting in stinging, reddening and swelling.
Ingestion: Contact can cause irritation of the gastrointestinal tract.

Repeated Exposure (Chronic)
• None Known

Synergistic Materials
• None Known

Medical Conditions Aggravated by Exposure
• None Known
4. FIRST AID MEASURES

Eyes:
IMMEDIATELY FLUSH EYES WITH A DIRECTED STREAM OF WATER for at least 20 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissues. Get medical attention immediately.

Skin:
In case of contact with the substance, immediately flush skin with cool running water for at least 20 minutes. To increase the neutralizing effect, use soap and water. For minor skin contact, avoid spreading material on unaffected skin. Remove contaminated clothing and shoes and wash before reuse. Get medical attention as soon as possible.

Inhalation:
Remove to fresh air. If breathing is difficult, have trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration. Get medical attention as soon as possible.

Ingestion:
Never give anything by mouth to an unconscious person. If swallowed, do not induce vomiting. Give large quantities of water. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

- Flash Point: Non-flammable
- Method: Non-flammable
- Autoignition Temperature: Non-flammable
- Flammable Limits in Air, by Volume:
  - Upper: Non-flammable
  - Lower: Non-flammable
- Extinguishing Media: As required by fire conditions
- Fire Fighting Procedures:
  Wear NIOSH/MSHA approved positive-pressure self-contained breathing apparatus and full protective clothing

Fire and Explosion Hazard: None

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions
  - Evacuate unnecessary personnel.
  - Follow protective measures provided under Personal Protection in Section 8.

- Environmental Precautions
  - According to CERCLA regulations, environmental releases that exceed the RQ must be reported to the National Response Center at 1.800.424.8802. State and local response centers may also need to be contacted.
  - Contain liquids and prevent discharges to streams or sewers. Large leaks may require environmental consideration and possible evacuation.

- Methods for Cleaning Up
  - Pools of liquid may be collected into storage vessels for later reclamation or disposal.
  - Neutralize washings with a base such as soda ash or lime.
  - Flush residual spill area with large amounts of water.
7. HANDLING AND STORAGE

Handling

• Avoid breathing the mist or vapors. Do not get in eyes, on skin or clothing. Wash contaminated clothing before reuse. Do not take internally. Wear personal protective equipment as described in Exposure Controls/Personal Protection (Section 8) of the MSDS. Wash thoroughly after handling; exposure can cause burns, which are not immediately painful or visible.

Storage

• No special handling measures are necessary.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
• Provide natural or mechanical ventilation to minimize exposure.

Personal Protection
Respiratory:
• Respiratory protection is not required under normal use.
• If needed, wear an approved NIOSH/MSHA respirator.

Eye/Face:
• Wear chemical safety goggles. (ANSI Z87.1)
• When appropriate, use a face shield to protect against splashing.

Skin:
• Wear chemical resistant gloves such as rubber, neoprene or vinyl.
• Wash contaminated clothing and dry before reuse.
• Whenever there is a possibility of splash or contact, wear a chemical resistant full body suit and boots.
• Wear standard work clothing closed at the neck and wrists.
• Discard shoes that cannot be decontaminated.

Other:
• Emergency shower and eyewash facility should be in close proximity. (ANSI Z358.1)

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Essentially odorless</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>212° F</td>
</tr>
<tr>
<td>Melting Point</td>
<td>ND</td>
</tr>
<tr>
<td>Specific Gravity (Water =1)</td>
<td>1.215</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Completely soluble</td>
</tr>
<tr>
<td>Vapor Pressure (Air = 1) (100% Acid)</td>
<td>ND</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>ND</td>
</tr>
<tr>
<td>Evaporation Rate (Butyl acetate = 1)</td>
<td>ND</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Chemical Stability:
Stable

Reacts with:
Reaction with caustic can generate heat

Hazardous Polymerization:
Will not occur

Hazardous Decomposition Products:
None known
11. **TOXICOLOGICAL INFORMATION**

Data Not Available

12. **ECOLOGICAL INFORMATION**

Data Not Available

13. **DISPOSAL INFORMATION**

Dispose of all waste and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations.

14. **TRANSPORT INFORMATION**

- **DOT Proper Shipping Name:** Corrosive liquid, acidic, organic, n.o.s. (*Citric Acid)*
- **DOT Hazard Class:** 8 (Corrosive)
- **DOT Identification Number:** UN 3265
- **DOT Packaging Group:** III
- **DOT Hazardous Substance:** Not applicable
- **DOT Marine Pollutant(s):** Not applicable
- **Additional Description Requirement:** Not applicable

*Product not regulated in Bulk Rail or Motor Tanks 49 CFR 173.154 (d) (2)*

15. **REGULATORY INFORMATION**

**SARA Title III**

To aid our customers in complying with regulatory requirements, the following chemicals fall under SARA Title III Hazard categories as listed in 40.CFR.370. Please consult these regulations for details.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
</tr>
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<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

16. **OTHER INFORMATION**

For additional non-emergency health, safety or environmental information, contact:

**Chemical Systems**
6429 West Jones Avenue
P.O. Box 810
Zellwood, FL 32798
Phone Number: 407.886.2329

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