1. Ingredients:

Section 313 Supplier Notifications

This product contains the following toxic chemicals subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of CFR 372:

<table>
<thead>
<tr>
<th>Case #</th>
<th>Chemical Name</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>007664-38-2</td>
<td>Phosphoric acid</td>
<td>56%</td>
</tr>
<tr>
<td>007732-18-5</td>
<td>Water</td>
<td>Not listed in 313</td>
</tr>
<tr>
<td>000111-76-2</td>
<td>Ethyleneglycolmonobutylether</td>
<td>18%</td>
</tr>
<tr>
<td>000526-95-4</td>
<td>Gluconic acid</td>
<td>Not listed in 313</td>
</tr>
<tr>
<td>068131-40-8</td>
<td>Alkylxopolyethyleneoxyethanol</td>
<td>Not listed in 313</td>
</tr>
</tbody>
</table>

*This Information Must Be Included In All MSDS That Are Copied And Distributed For This Material.*

2. Physical Data:

*Boiling Point:* 220 °F

*Vapor Pressure:* 16 mm Hg @ 20° C.

*Vapor Density:* Heavier than air

*Solubility in Water:* Complete

*Specific Gravity:* 1.31

*Volatile:* 22 ½ % (wt.)

*Appearance:* Amber liquid

*Odor:* Mixed chemical odor
3. Fire & Explosion Hazard Data:

Flash Point: Above 220° F

Auto ignition Temperature: Not known

Flammable Limits: Not known

Extinguishing Media: CO2, Foam, and Dry Powder. Water will react with concentrated acid to produce heat of solution. Fire fighting techniques for these conditions should be employed.

Fire Fighting Equipment: Wear a positive pressure self-contained breathing apparatus.

4. Reactivity Data:

Stability: Normally Stable.

Conditions to avoid: Avoid storing this product in metal containers.

Incompatibility: Avoid strong oxidizers (Yellow label) avoid contact with any basic material as a violent reaction will occur, avoid high temperature sources which may induce thermal decomposition.

Hazardous Decomposition Products: The cleaning of metal parts in this cleaner may evolve heat and hydrogen; explosion-proof ventilation should be provided to avoid accumulation of explosive hydrogen gas. Involvement in fire may produce toxic fumes of phosphorus pentoxide along with carbon monoxide, aldehydes, soot and other toxic chemicals. None under normal condition.

Hazardous Polymerization: Will not occur.

5. Environmental and Disposal Information:

Action to Take For Spills/Leaks:

Small Spills: Ensure sufficient ventilation and mop up or use sorbent and place in marked lined containers for later disposal. Wear protective clothing while performing these clean-ups.

Large Spills: Contain spill by diking and transfer into marked and lined containers for disposal or reclamation. Avoid run-off into waterways.

RQ for phosphoric acid = 5000 lbs.

Disposal Method: Send to licensed disposal operation or consult Martin Chemicals, LLC for further information.
6. **Health Hazard Data:**

   **Eye:** Will cause pain and irritation on contact. Corneal injury is possible in event of one-time contact.

   **Skin Contact:** Irritant to skin. (Corrosive) phosphoric acid; acute dermal toxicity: LD 50 (rabbit) = 2740 mg/kg. Ethyleneglycolmonobutylether; OSHA PEL = 50 ppm

   **Skin Absorption:** Ethylene glycol monobutylether is readily absorbed by the skin. Frequent exposure may lead to harmful amounts being absorbed.

   **Ingestion:** Cause burns to esophageal tissues. Acute oral toxicity for phosphoric acid; LD 50 rat = 1530 mg/kg. Ethyleneglycolmonobutylether is moderately toxic.

   **Inhalation:** High concentrations of vapors of ethyleneglycolmonobutylether are irritating to the respiratory tract and may cause headache, dizziness, nausea, vomiting and malaise. Vapors and mists are irritating to the respiratory tract and may cause burns to the tissue (corrosive H3PO4).

7. **First Aid:**

   **Eyes:** Immediately flush eyes with a directed stream of water for at least 15 minutes while forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Get immediate medical attention.

   **Skin:** Immediately flush skin with water and wash with soap and water. If clothing is penetrated, use safety shower immediately and remove clothing under shower. Flush skin with large amounts of water for at least 15 minutes. Get prompt medical attention. Wash clothing thoroughly before reuse.

   **Inhalation:** Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Get immediate medical attention.

   **Ingestion:** If person is conscious, immediately administer large quantities of water. Do not induce vomiting. Avoid having an unconscious person vomit. Get immediate medical attention.

   **Note to Physician:** There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical conditions.
8. **Handling Precautions:**

*Exposure Guidelines:* Not known for this product mixture.

- Phosphoric Acid; OSHA TWA = 1mg/m³
- Ethyleneglycolmonobutylether; OSHA PEL (skin) TWA = 50 ppm or 240 mg/m³

*Ventilation:* Control airborne concentrations below the exposure guideline. Use only with adequate ventilation. Explosion proof local ventilation is necessary in cleaning operations that may evolve hydrogen gas.

*Respiratory Protection:* Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive-pressure self-contained breathing apparatus.

*Skin Protection:* When contact may occur, use protective clothing impervious to this material.

*Eye Protection:* Protect eyes from any contact by using a full face shield or chemical goggles.

9. **Additional Information:**

Store drums in a cool place. Open bungs slowly before removing to allow pressure to equalize. As with any corrosive material, handle with care and wear protective equipment when transferring concentrated liquid so that physical contact with product is avoided. Always add this product to water when diluting. Follow good personal hygiene practices.

*Disclaimer:* This material safety data sheet and the information it contains are offered to you in good faith as accurate. We have reviewed any information contained in this data sheet, which we received from sources outside the company. We believe this information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user’s obligation to evaluate and use this product safely and comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is made, either expressed or implied.