SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product identifier
Chemical Name
CAS No.
Trade Name
Product Code

Relevant identified uses of the substance or mixture and uses advised against
Identified Use(s)
Uses Advised Against

Company Identification

Telephone
E-Mail (competent person)

Emergency telephone number
Emergency Phone No.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture
OSHA HCS (29 CFR 1910.1200)

Label elements
Hazard Symbol

Signal word(s)
Hazard Statement(s)
Precautionary Statement(s)

DANGER
Causes serious eye damage.

Wear protective gloves/eye protection/face protection.
Wash hands and exposed skin after use.
IF INHALED: Get medical advice/attention if you feel unwell.
IF ON SKIN: Wash with plenty of soap and water. If irritation (redness, rash, blistering) develops, get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Other hazards
None

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous Ingredient(s)</th>
<th>% wt. *</th>
<th>CAS No.</th>
<th>Hazard classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic acid salt mixture</td>
<td>20 - 25</td>
<td>Trade Secret</td>
<td>Acute Tox. 4; H302</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Dam. 1; H318</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Met. Corr. 1; H290</td>
</tr>
<tr>
<td>Surfactant mixture</td>
<td>&lt;2</td>
<td>Trade Secret</td>
<td>Skin Irrit. 2; H315</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Eye Irrit. 2; H320</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Acute 3; H402</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 3; H412</td>
</tr>
</tbody>
</table>

Additional Information - Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below: None

* The exact percentage withheld as a trade secret in accordance with 29 CFR 1910.1200.

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Inhalation
Get medical advice/attention if you feel unwell.

Skin Contact
Wash affected skin with soap and water. If irritation (redness, rash, blistering) develops, get medical attention.

Eye Contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

Ingestion
Call a POISON CENTER or doctor/physician if you feel unwell.

Most important symptoms and effects, both acute and delayed
Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media
- Suitable Extinguishing Media
  Non-combustible. As appropriate for surrounding fire.
- Unsuitable Extinguishing Media
  None anticipated.

Special hazards arising from the substance or mixture
Combustion or thermal decomposition will evolve toxic and irritant vapours.

Advice for fire-fighters
A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions. Keep containers cool by spraying with water if exposed to fire.
SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Avoid contact with skin and eyes. Wear protective gloves/eye protection/face protection. Avoid breathing mist/vapours/spray.

Environmental precautions
Prevent liquid entering sewers, basements and work pits.

Methods and material for containment and cleaning up
Cover spills with inert absorbent material. Transfer to a container for disposal or recovery.

Reference to other sections
None

Additional Information
None

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling
Avoid contact with skin and eyes. Wear protective gloves/eye protection/face protection. Avoid breathing mist/vapours/spray.

Conditions for safe storage, including any incompatibilities
- Storage temperature
  Keep in a well ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

- Incompatible materials
  This product should be stored away from sources of strong heat and oxidizing chemicals. Do not use with: Chlorates, Nitrates, hypochlorites, or alkaline materials.

Specific end use(s)
Acid Based Cleaning Product

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

<table>
<thead>
<tr>
<th>SUBSTANCE.</th>
<th>CAS No.</th>
<th>(8hr TWA) PEL (OSHA)</th>
<th>TLV (ACGIH) (STEL) PEL (OSHA)</th>
<th>TLV (ACGIH)</th>
<th>Note:</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

-LTEL: Long Term Exposure Limit; STEL: Short Term Exposure Limit

Recommended monitoring method
None

Exposure controls
Not normally required.

Personal protection equipment
Eye/face protection
Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection (Hand protection/ Other)
Wear suitable gloves if prolonged skin contact is likely. Check with protective equipment manufacturer’s data.
Respiratory protection
Normally no personal respiratory protection is necessary. In case of insufficient ventilation, wear suitable respiratory equipment. Check with protective equipment manufacturer's data.

Thermal hazards
Not normally required. Use gloves with insulation for thermal protection, when needed.

Environmental Exposure Controls
Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

- **Appearance**: Liquid
- **Color**: Colorless to light yellow
- **Odor**: Characteristic
- **Odor Threshold (ppm)**: Not available
- **pH (Value)**: Not available
- **Melting Point (°C)**: ~0 °C (similar to water)
- **Freezing Point (°C)**: ~0 °C (similar to water)
- **Boiling point/boiling range (°C)**: ~100 °C (similar to water)
- **Flash Point (°C)**: Not applicable
- **Evaporation Rate**: Not available
- **Flammability (solid, gas)**: Not applicable
- **Explosive Limit Ranges**: Not available
- **Vapor pressure (Pascal)**: Not available
- **Vapor Density**: Not available
- **Density (g/ml)**: Not available
- **Solubility (Water)**: Not available
- **Solubility (Other)**: Not available
- **Partition Coefficient (n-Octanol/water)**: Not available
- **Auto Ignition Point (°C)**: Not available
- **Decomposition Temperature (°C)**: Not available
- **Kinematic Viscosity (cSt)**: Not available
- **Explosive properties**: Not available
- **Oxidizing properties**: Not available
- **Other information**: Not available

SECTION 10: STABILITY AND REACTIVITY

- **Reactivity**: Stable under normal conditions.
- **Chemical stability**: Stable.
- **Possibility of hazardous reactions**: None anticipated.
- **Conditions to avoid**: Incompatible materials.
- **Incompatible materials**: This product should be stored away from sources of strong heat and oxidizing chemicals. Do not use with: Chlorates, Nitrates, hypochlorites, or alkaline materials.
- **Hazardous decomposition product(s)**: Carbon monoxide, Carbon dioxide, Acrid smoke

SECTION 11: TOXICOLOGICAL INFORMATION

- **Exposure routes**: Inhalation, Skin Contact, Eye Contact
Information on toxicological effects

Organic acid salt mixture (CAS# Trade Secret) - By analogy with similar materials:

Acute toxicity  
LD50 (oral): ~1121 mg/kg-bw (rat)

Irritation  
Causes serious eye damage.

Sensitisation  
Not available.

Repeated dose toxicity  
Not available.

Developmental Toxicity  
Not available.

Toxicity for reproduction  
Not available.

Carcinogenicity  
It is unlikely to present a carcinogenic hazard to man.

<table>
<thead>
<tr>
<th>NTP</th>
<th>IARC</th>
<th>ACGIH</th>
<th>OSHA</th>
<th>NIOSH</th>
</tr>
</thead>
</table>

Other information  
None

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Organic acid salt mixture (CAS# Trade Secret) - By analogy with similar materials:

Short term  
LC0 (96 hour): >142 mg/l (fish)
LC50 (48 hour): ~71 mg/l (aquatic invertebrate)

Long Term  
Not available.

Persistence and degradability  
Not available.

Bioaccumulative potential  
Not available.

Mobility in soil  
Not available.

Results of PBT and vPvB assessment  
Not available.

Other adverse effects  
None known.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods  
Disposal should be in accordance with local, state or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

SECTION 14: TRANSPORT INFORMATION

U.S. DOT  
Sea transport (IMDG)  
Air transport (ICAO/IATA)

UN number  
Not classified as dangerous for transport.

Proper Shipping Name  
Not available.

Transport hazard class(es)  
Not available.

Packing group  
Not available.

Environmental hazards  
Not available.

Special precautions for user  
Not available.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:
TSCA (Toxic Substance Control Act) - Inventory Status: All components listed or polymer exempt.

Designated Hazardous Substances and Reportable Quantities (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>RQ (Pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

SARA 311/312 - Hazard Categories:
- ☑ Fire
- ☑ Sudden Release
- ☑ Reactivity
- ☑ Immediate (acute)
- ☑ Chronic (delayed)

SARA 313 - Toxic Chemicals (40 CFR 372):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

SARA 302 - Extremely Hazardous Substances (40 CFR 355):

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Typical %wt.</th>
<th>TPQ (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

California Proposition 65 List:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Type of Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

Date of preparation: April 14, 2015

Hazard Statement(s) and Risk Phrases Listed in: SECTION 2:/ SECTION 3:

Hazard Statement(s)
- H290: May be corrosive to metals.
- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H318: Causes serious eye damage.
- H320: Causes eye irritation.
- H402: Toxic to aquatic life.
- H412: Harmful to aquatic life with long lasting effects.

Training advice: None.

Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to satisfy oneself as to the suitability and completeness of this information for the user’s own particular use.