1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier:
   - Trade Name (as labeled): Alto Shaam Water Soluble Cleaning Pouches
   - Part/Item Number: CE-28892

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:
   - Recommended Use: Commercial Kitchen Cleaning Product

1.3 Details of the Supplier of the Safety Data Sheet:
   - Manufacturer/Supplier Name: Alto-Shaam
   - Manufacturer/Supplier Address: W164 N9221 Water Street
     Menomonee Falls, WI 53052
   - Manufacturer/Supplier Telephone Number: (800) 558-8744

1.4 Emergency Telephone Number:
   - Emergency Contact Telephone Number: (800) 558-8744

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture:

<table>
<thead>
<tr>
<th>GHS Classification</th>
<th>Health</th>
<th>Environmental</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skin Corrosion Category 1B (H314)</td>
<td>Aquatic Chronic Category 3 (H412)</td>
<td>Corrosive to Metals Category 1 (H290)</td>
</tr>
<tr>
<td></td>
<td>Eye Damage Category 1 (H318)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specific Target Organ Toxicant Category 3 (H335)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EU Classification: Corrosive (C) R34, R52/53

2.2 Label Elements:

Signal Word: Danger!
Contains: Sodium Metasilicate Anhydrous, Sodium Tripolyphosphate Anhydrous
Hazard Phrases | Precautionary Phrases
---|---
H290 May be corrosive to metals. | P260 Do not breathe dust. 
P264 Wash thoroughly after handling. 
P273 Avoid release to the environment. 
P280 Wear protective gloves, protective clothing, eye protection and face protection. 
P305\+P351\+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 
P301\+P330\+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 
P303\+P361\+P353 IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water. 
P304\+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. 
P310 Immediately call a POISON CENTER or doctor. 
P501 Dispose of contents and container in accordance with local and national regulations.
H314 Causes severe skin burns and eye damage. | 
H335 May cause respiratory irritation | 
H412 Harmful to aquatic life with long lasting effects.
### Skin
Flush exposed skin with cold water then wash skin with soap and water for at least 20 minutes. Remove and launder clothing before re-use. Get immediate medical attention.

### Inhalation
Immediately remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, have qualified personnel administer oxygen. If breathing has stopped, administer artificial respiration. Get immediate medical attention.

### Ingestion
Do NOT induce vomiting. If the victim is conscious and alert, have them rinse their mouth with water. Never give anything by mouth to an unconscious or convulsing person. Get immediate medical attention.

**4.2 Most Important Symptoms and Effects, Both Acute and Delayed:**
May cause severe eye and skin irritation and burns. Inhalation of dust may cause respiratory irritation. May be harmful if swallowed. May cause burns to mouth and throat if swallowed.

**4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed:**
Immediate medical attention is required for eye and skin contact and ingestion.

**Note to Physicians (Treatment, Testing, and Monitoring):** Treat symptomatically.

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### 5. FIRE-FIGHTING MEASURES

**5.1 Extinguishing Media:** Use media that is appropriate for the surrounding fire.

**5.2 Special Hazards Arising from the Substance or Mixture:**
None known

**5.3 Advice for Fire-Fighters:**

**Fire Fighting Procedures:** Cool fire exposed containers with water. Contain water used in firefighting from entering sewers or natural waterways.

**Precautions for Fire Fighters:** Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus. Do not enter fire area without proper protection.

---

### 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:**
Prevent contact with skin, eyes or clothing. Do not breathe dust or allow it to contaminate skin or clothing. For spills of dust, wear respirator and protective clothing (see Section 8).

**6.2 Environmental Precautions:**
Avoid releases to the environment. Report releases as required by local and national authorities.

**6.3 Methods and Material for Containment and Cleaning up:**
Sweep up and collect spilled material taking care not to raise dust.

**6.4 Reference to Other Sections:**
Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information.
## 7. HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling:

Prevent contact with the eyes, skin and clothing. Do not breathe dust. Wear protective clothing and equipment as described in Section 8. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Do not eat, drink or smoke in the work area.

Empty containers retain product residues and can be hazardous. Follow all SDS precautions when handling empty containers.

### 7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Store in a tightly closed container away from incompatible materials. Store away from food or beverages.

### 7.3 Specific End Use (s):

For professional use only.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control Parameters:

#### Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>United States</th>
<th>Germany</th>
<th>United Kingdom</th>
<th>European Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>None Established</td>
<td>None Established</td>
<td>None Established</td>
<td>None Established</td>
</tr>
<tr>
<td>Sodium Metasilicate Anhydrous</td>
<td>None Established</td>
<td>None Established</td>
<td>None Established</td>
<td>None Established</td>
</tr>
<tr>
<td>Tetrasodium Triphosphate</td>
<td>5 mg/m³ TWA NIOSH REL</td>
<td>None Established</td>
<td>5 mg/m³ STEK UK WEL</td>
<td>None Established</td>
</tr>
<tr>
<td>Troclosene sodium dihydrate</td>
<td>None Established</td>
<td>None Established</td>
<td>None Established</td>
<td>None Established</td>
</tr>
</tbody>
</table>

#### Biological Exposure Limits:

None Established

### 8.2 Exposure Controls:

**Appropriate Engineering Controls:** Use ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits.
Individual Protection Measures (PPE):
Specific Eye/face Protection: Wear safety goggles if eye contact is possible.
Specific Skin Protection: Wear rubber gloves if contact with product is possible.
Specific Respiratory Protection: If needed, an approved respirator with particulate filters may be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.
Specific Thermal Hazards: None required.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>White powder</td>
</tr>
<tr>
<td>Explosive limits: LEL:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive limits: UEL:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor:</td>
<td>Bland</td>
</tr>
<tr>
<td>Vapor pressure (mmHg):</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor density:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH:</td>
<td>11.50</td>
</tr>
<tr>
<td>Relative density:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting/freezing point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility(ies):</td>
<td>Not soluble in water</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Auto-ignition temperature:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas):</td>
<td>Not combustible in solid form.</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosive Properties:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Oxidizing Properties:</td>
<td>None</td>
</tr>
</tbody>
</table>

9.2 Other Information: None available.

10. STABILITY AND REACTIVITY

10.1 Reactivity: Not normally reactive.

10.2 Chemical Stability: Stable under normal conditions.

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

10.4 Conditions to Avoid: Keep away from metals. Avoid moisture and elevated temperatures.

10.5 Incompatible materials: Avoid contact with strong acids.

10.6 Hazardous Decomposition Products: Oxides of carbon and phosphorus.
11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:

Potential Health Effects:
Eyes: Corrosive. May cause severe irritation or burns with redness, tearing and blurred vision. May cause permanent eye damage.
Skin: May cause severe irritation or burns with redness and pain. Prolonged contact with dilute solutions may cause dermatitis.
Ingestion: May cause severe burns to mouth and throat.
Inhalation: Inhalation of vapors may cause mucous membrane and respiratory irritation with a burning sensation of the nose and throat, watering of the eyes, and difficulty in breathing.

Chronic Health Effects: No chronic effects are expected.

Irritation: No data available.

Corrosivity: No product data available. This product is classified as corrosive to eyes and skin based on the classification of Sodium Metasilicate Anhydrous.

Sensitization: No adverse effects expected. Components are not sensitizers.

Carcinogenicity: None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH or the EU CLP.

Mutagenicity: This product is not expected to present a risk of genetic damage.

Acute Toxicity Data:
Tetrasodium pyrophosphate: Oral rat LD50: 300-2000 mg/kg; Inhalation rat LD50: >0.58 mg/L; Dermal rabbit LD50: >2000mg/kg
Sodium Metasilicate Anhydrous: Oral rat LD50: 1200-1700 mg/kg; Inhalation rat LD50: > 2.06 mg/L; Dermal rat LD50 >5000 mg/kg
Sodium Carbonate: Oral rat LD50: 2800 mg/kg; Inhalation rat LC50: 2300 mg/m3 air; Dermal rabbit LD50: >2000 mg/kg

Reproductive Toxicity Data: This product is not expected to present a risk of adverse reproductive or developmental toxicity.

Specific Target Organ Toxicity (STOT):
Single Exposure: No data available.
Repeated Exposure: No data available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity: This product is classified as harmful to aquatic organisms based on troclosene sodium dihydrate
Tetrasodium Triphosphate: Oncorhynchus mykiss: 96hr LC50: >100 mg/L; Daphnia magna 48hr EC50: >100 mg/L
Sodium Metasilicate Anhydrous: Gambusia affinis 96hr LC50: 2320 mg/L; Daphnia magna 48hr EC50: 1700 mg/L
Sodium Carbonate: Lepomis macrochirus 96hr LC50: 300 mg/L; Daphnia magna 48hr; Ceriodaphnia sp. 48 hr EC50: 200-227 mg/L

12.2 Persistence and Degradability: No data available.

12.3 Bio-accumulative Potential: No data available.

12.4 Mobility in Soil: No data available.
12.5 Results of PBT and vPvB Assessment: Not required

12.6 Other Adverse Effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods:

**Regulations:** Dispose in accordance with all national and local regulations.

**Properties (Physical/Chemical) Affecting Disposal:** Empty containers retain product residues and can be hazardous. Follow all SDS precautions when handling empty containers.

**Waste Treatment Recommendations:** Dispose in accordance with national and local regulations.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>14.1 UN Number</th>
<th>14.2 UN Proper Shipping Name</th>
<th>14.3 Hazard Class(s)</th>
<th>14.4 Packing Group</th>
<th>14.5 Environmental Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT</td>
<td>UN3253</td>
<td>Disodium trioxosilicate mixture</td>
<td>8</td>
<td>III</td>
</tr>
<tr>
<td>ADR/RID</td>
<td>UN3253</td>
<td>Disodium trioxosilicate mixture</td>
<td>8</td>
<td>III</td>
</tr>
<tr>
<td>IMDG</td>
<td>UN3253</td>
<td>Disodium trioxosilicate mixture</td>
<td>8</td>
<td>III</td>
</tr>
<tr>
<td>IATA/ICAO</td>
<td>UN3253</td>
<td>Disodium trioxosilicate mixture</td>
<td>8</td>
<td>III</td>
</tr>
</tbody>
</table>

14.6 Special Precautions for User: Not applicable.

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

15. REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

**EU REACH:** Contact Nyco for information on REACH Status.

16. OTHER INFORMATION

HMIS Hazard Rating:
Health – 2  Flammability – 0  Physical Hazard– 0

Full text of Classification abbreviations used in Section 2 and 3:
C Corrosive
N
Xi Irritant
Xn Harmful
R22 Harmful if swallowed.
R34 Causes burns.
R36 Irritating to eyes.
R37 Irritating to respiratory system.
R41 Risk of serious damage to eyes.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

| Acute Tox. 4 Acute Toxicity Category 4 |
| Aquatic Acute 1 Aquatic Acute Toxicity Category 1 |
| Aquatic Chronic 1 Aquatic Chronic Toxicity Category 1 |
| Eye Dam. 1 Eye Damage Category 1 |
| Eye Irrit. 2 Eye Irritant Category 2 |
| Metal Corr. 1 Corrosive to metals Category 1 |
| Skin Corr. 1B Skin Corrosion Category 1B |
| STOT SE Cat 3 Specific Target Organ Toxicity Single Exposure Category 3 |
| H290 May be corrosive to metals |
| H302 Harmful if swallowed. |
| H314 Causes severe skin burns and eye damage. |
| H315 Causes skin irritation. |
| H318 Causes serious eye damage. |
| H319 Causes serious eye irritation. |
| H335 May cause respiratory irritation. |
| H400 Very toxic to aquatic life. |
| H410 Very toxic to aquatic life with long lasting effects. |
| H411 Toxic to aquatic life with long lasting effects. |

Supersedes: None
Date updated: 28 March 2014
Revision Summary: New SDS

Data Sources: US NLM ChemID Plus and HSDB, Substance SDS for components, IUCLID Dataset EU Chemical Bureau, ESIS, Country websites for occupational exposure limits.