## SECTION 1: IDENTIFICATION

## Product Identifier

Product Form: Mixture
Product Name: Super Alk HD (AFCO 5237)
Product Code: AFCO 5237
Intended Use of the Product
Use of the Substance/Mixture: Heavy duty caustic cleaner for CIP cleaning of food processing equipment. For professional use only. Name, Address, and Telephone of the Responsible Party

## Company

Alex C. Fergusson, LLC.
800 Development Avenue
Chambersburg, PA 17201
T 800-345-1329
www.afcocare.com
Emergency Telephone Number
Emergency number : 1-800-424-9300 (CHEMTREC)

## SECTION 2: HAZARDS IDENTIFICATION

## Classification of the Substance or Mixture

Classification (GHS-US)
Met. Corr. 1 H290
Skin Corr. 1A H314
Eye Dam. 1 H318
Aquatic Acute 3 H 402

## Label Elements

## GHS-US Labeling

 Hazard Pictograms (GHS-US)Signal Word (GHS-US)
Hazard Statements (GHS-US)

: Danger
: H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage H318-Causes serious eye damage H402 - Harmful to aquatic life
Precautionary Statements (GHS-US) : P234-Keep only in original container. P260 - Do not breathe mist if inhalable mists occur during use.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340-IF INHALED: Remove victim 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/physician.
P321 - Specific treatment (see section 4).
P363-Wash contaminated clothing before reuse.
P390-Absorb spillage to prevent material damage.

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P405 - Store locked up.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations.

## Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Corrosive vapors.
Unknown Acute Toxicity (GHS-US) Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

## Substances

Mixture

| Name | Product identifier | \% (w/w) | Classification (GHS-US) |
| :--- | :--- | :--- | :--- |
| Water | (CAS No) 7732-18-5 | $50-70$ | Not classified |
| Sodium hydroxide | (CAS No) 1310-73-2 | $30-50$ | Met. Corr. 1, H290 <br> Skin Corr. 1A, H314 <br> Eye Dam. 1, H318 <br> Aquatic Acute 3, H402 |
| Sodium gluconate | (CAS No) 527-07-1 | $1-5$ | Not classified |
| Aminotri(methylenephosphonic acid) | (CAS No) 6419-19-8 | $0.1-1$ | Met. Corr. 1, H290 <br> Eye Irrit. 2A, H319 |

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

## Description of 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). IF exposed or concerned: Get medical advice/attention.
Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician.
Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

## Most Important Symptoms and Effects Both Acute and Delayed

General: Corrosive. Causes burns. Causes serious eye damage.
Inhalation: None under normal and intended conditions of use.
Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.
Eye Contact: Causes serious eye damage.
Ingestion: Ingestion is likely to be harmful or have adverse effects.
Chronic Symptoms: Not available
Indication of Any Immediate Medical Attention and Special Treatment Needed
If exposed or concerned, get medical advice and attention.

## SECTION 5: FIRE-FIGHTING MEASURES

## Extinguishing Media

Suitable Extinguishing Media: Water spray, fog, carbon dioxide, foam, dry chemical.
Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.
Special Hazards Arising From the Substance or Mixture
Fire Hazard: Not considered flammable but may burn at high temperatures.
Explosion Hazard: Product is not explosive.
Reactivity: Contact with metals may evolve flammable hydrogen gas.

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## 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: Sodium oxides. Carbon oxides ( $\mathrm{CO}, \mathrm{CO}_{2}$ ). Nitrogen oxides. Corrosive vapors.
Other information: Do not allow run-off from fire fighting to enter drains or water courses.
Reference to Other Sections
Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
General Measures: Do NOT breathe mist or spray. Do not get in eyes, on skin, or on clothing.
For Non-Emergency Personnel
Protective Equipment: Use appropriate personal protection equipment (PPE).
Emergency Procedures: Evacuate unnecessary personnel.
For Emergency Personnel
Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Ventilate area.

## Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

## Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Cautiously neutralize spilled liquid. Absorb and/or contain spill with inert material, then place in suitable container.
Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Do not take up in combustible material such as: saw dust or cellulosic material. Contact competent authorities after a spill. Cautiously neutralize spilled liquid. Absorb spillage to prevent material damage.

## Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

## Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes. May be corrosive to metals. Contact with metals may evolve flammable hydrogen gas.
Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

## Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.
Storage Conditions: Store in a well-ventilated place. Keep container tightly closed. Keep/Store away from heat, direct sunlight, extremely high or low temperatures, incompatible materials.
Incompatible Materials: Strong acids, strong oxidizers. Metals.
Specific End Use(s)
Heavy duty caustic cleaner for CIP cleaning of food processing equipment. For professional use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## Control Parameters

Sodium hydroxide (1310-73-2)

| Mexico | OEL Ceiling $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | $2 \mathrm{mg} / \mathrm{m}^{3}$ |
| :--- | :--- | :--- |
| USA ACGIH | ACGIH Ceiling $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | $2 \mathrm{mg} / \mathrm{m}^{3}$ |
| USA OSHA | OSHA PEL (TWA) $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | $2 \mathrm{mg} / \mathrm{m}^{3}$ |
| USA NIOSH | NIOSH REL (ceiling) $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | $2 \mathrm{mg} / \mathrm{m}^{3}$ |
| USA IDLH | US IDLH $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | $10 \mathrm{mg} / \mathrm{m}^{3}$ |
| Ontario | OEL Ceiling $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | $2 \mathrm{mg} / \mathrm{m}^{3}$ |

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| Québec | PLAFOND $\left(\mathrm{mg} / \mathrm{m}^{3}\right)$ | $2 \mathrm{mg} / \mathrm{m}^{3}$ |
| :--- | :--- | :--- |

## Exposure Controls

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


Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosionproof clothing.
Hand Protection: Wear chemically resistant protective gloves.
Eye Protection: Chemical goggles or face shield.
Skin and Body Protection: Wear suitable protective clothing.
Respiratory Protection: A respirator is not needed under normal and intended conditions of product use.
Thermal Hazard Protection: Wear suitable protective clothing.
Other Information: When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

## Information on Basic Physical and Chemical Properties

Physical State : Liquid
Appearance : Clear, colorless liquid
Odor : Slight
Odor Threshold : Not available
pH : >13
Relative Evaporation Rate (butylacetate=1) : Not available
Melting Point : Not available
Freezing Point : Not available
Boiling Point : $107.2^{\circ} \mathrm{C}\left(224.96^{\circ} \mathrm{F}\right)$
Flash Point
: None
Auto-ignition Temperature
Decomposition Temperature
: None
: Not available
Flammability (solid, gas) : Not available
Lower Flammable Limit : Not available
Upper Flammable Limit : Not available
Vapor Pressure : Not available
Relative Vapor Density at $20^{\circ} \mathrm{C} \quad: \quad$ Not available
Specific Gravity $\quad: 1.38$
Solubility : Complete.
Partition coefficient: $\mathbf{n}$-octanol/water : Not available
Viscosity : Not available
Explosion Data - Sensitivity to Mechanical Impact : Not expected to present an explosion hazard due to mechanical impact.
Explosion Data - Sensitivity to Static Discharge : Not expected to present an explosion hazard due to static discharge.

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## SECTION 10: STABILITY AND REACTIVITY

Reactivity: Contact with metals may evolve flammable hydrogen gas.
Chemical Stability: Stable at standard temperature and pressure.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Incompatible materials.
Incompatible Materials: Strong acids. Strong oxidizers. Metals.
Hazardous Decomposition Products: Carbon oxides (CO, CO2). Thermal decomposition generates : Toxic gases. Nitrogen oxides.
Corrosive vapors.
SECTION 11: TOXICOLOGICAL INFORMATION

## Information on Toxicological Effects - Product

Acute Toxicity: Not classified
LD50 and LC50 Data: Not available
Skin Corrosion/Irritation: Causes severe skin burns.
pH: Not available
Serious Eye Damage/Irritation: Causes serious eye damage.
pH: Not available
Respiratory or Skin Sensitization: Not classified
Germ Cell Mutagenicity: Not classified
Teratogenicity: Not available
Carcinogenicity: Not classified
Specific Target Organ Toxicity (Repeated Exposure): Not classified
Reproductive Toxicity: Not classified
Specific Target Organ Toxicity (Single Exposure): Not classified
Aspiration Hazard: Not classified
Potential Adverse Human Health Effects and Symptoms: Harmful if inhaled. Harmful if swallowed.
Symptoms/Injuries After Inhalation: None under normal and intended conditions of use.
Symptoms/Injuries After Skin Contact: Contact may cause immediate severe irritation progressing quickly to chemical burns.
Symptoms/Injuries After Eye Contact: Causes serious eye damage.
Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.
Information on Toxicological Effects - Ingredient(s)
LD50 and LC50 Data:

| Water (7732-18-5) |  |
| :--- | :--- |
| LD50 Oral Rat | $>90000 \mathrm{mg} / \mathrm{kg}$ |
| Aminotri(methylenephosphonic acid) (6419-19-8) |  |
| LD50 Dermal Rabbit | $>6310 \mathrm{mg} / \mathrm{kg}$ |

## SECTION 12: ECOLOGICAL INFORMATION

## Toxicity

Ecology - General: Harmful to aquatic life.

| Sodium hydroxide (1310-73-2) |  |
| :--- | :--- |
| LC50 Fish 1 | $40 \mathrm{mg} / \mathrm{l}$ |
| Aminotri(methylenephosphonic acid) (6419-19-8) |  |
| LC50 Fish 1 | $8132 \mathrm{mg} / \mathrm{l}$ (Exposure time: 96 h - Species: Pimephales promelas) |
| EC50 Daphnia 1 | $297 \mathrm{mg} / \mathrm{l}$ (Exposure time: 48 h - Species: Daphnia magna) |
| EC50 Other Aquatic Organisms 1 | $19.6 \mathrm{mg} / \mathrm{l}$ (Exposure time: 96 h - Species: Pseudokirchneriella subcapitata) |
| LC 50 Fish 2 | $330 \mathrm{mg} / \mathrm{l}$ (Exposure time: 96 h - Species: Lepomis macrochirus [static]) |

Persistence and Degradability Not available
Bioaccumulative Potential

| Super Alk HD (AFCO 5237) |  |
| :--- | :---: |
| Bioaccumulative Potential | Not established. |
| $4 / 11 / 2017$ | EN(English US) |

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| Aminotri(methylenephosphonic acid) (6419-19-8) |  |
| :--- | :--- |
| BCF fish 1 | $18-24$ |
| Log Pow | -3.53 (at $\left.25^{\circ} \mathrm{C}\right)$ |

Mobility in Soil Not available

## Other Adverse Effects

Other Information: Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.
Ecology - Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.


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| Aminotri(methylenephosphonic acid) (6419-19-8) |
| :--- |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| Sodium gluconate (527-07-1) |
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |
| US State Regulations |
| Sodium hydroxide (1310-73-2) |
| U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute |
| U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728) |
| U.S. - New Jersey - Discharge Prevention - List of Hazardous Substances |
| U.S. - New Jersey - Right to Know Hazardous Substance List |
| U.S. - New Jersey - Special Health Hazards Substances List |
| U.S. - New York - Occupational Exposure Limits - TWAs |
| U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances |
| U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List |
| U.S. - Pennsylvania - RTK (Right to Know) List |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |
| Aminotri(methylenephosphonic acid) (6419-19-8) |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |
| Sodium gluconate (527-07-1) |
| U.S. - Texas - Effects Screening Levels - Long Term |
| U.S. - Texas - Effects Screening Levels - Short Term |

## Canadian Regulations

## Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.
Sodium hydroxide (1310-73-2)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Aminotri(methylenephosphonic acid) (6419-19-8)
Listed on the Canadian DSL (Domestic Substances List) inventory.
Sodium gluconate (527-07-1)
Listed on the Canadian DSL (Domestic Substances List) inventory.
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

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

## Revision date

Other Information

4/11/2017
: 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:

| Aquatic Acute 3 | Hazardous to the aquatic environment - Acute Hazard Category 3 |
| :--- | :--- |
| Eye Dam. 1 | Serious eye damage/eye irritation Category 1 |
| Eye Irrit. 2A | Serious eye damage/eye irritation Category 2A |
| Met. Corr. 1 | Corrosive to metals Category 1 |
| Skin Corr. 1A | Skin corrosion/irritation Category 1A |
| H290 | May be corrosive to metals |
| H314 | Causes severe skin burns and eye damage |
| H318 | Causes serious eye damage |
| H319 | Causes serious eye irritation |

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| H4O2 |  | Harmful to aquatic life |
| :--- | :--- | :--- |
| NFPA Health Hazard | $:$ | 3 - Short exposure could cause serious temporary or |
|  | residual injury even though prompt medical attention was |  |
|  | given. |  |
| NFPA Fire Hazard | $: 0-$ Materials that will not burn. |  |
| NFPA Reactivity | $:$ | $1-$ Normally stable, but can become unstable at elevated |
|  | temperatures and pressures or may react with water with |  |
|  | some release of energy, but not violently. |  |

## HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is
Flammability : O Minimal Hazard
Physical : 1 Slight Hazard
Party Responsible for the Preparation of This Document
Alex C. Fergusson, LLC.
800 Development Avenue
Chambersburg, PA 17201
800-345-1329

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.

