

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Form:** Mixture

**Product Name:** Smart CIP (AFCO 5544)

**Product Code:** AFCO 5544

### Intended Use of the Product

Chlorinated alkaline detergent. 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](http://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
Acute Tox. 4 (Oral)	H302
Skin Corr. 1B	H314
Eye Dam. 1	H318
STOT SE 3	H335
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

### Label Elements

#### **GHS-US Labeling**

#### **Hazard Pictograms (GHS-US)**



#### **Signal Word (GHS-US)**

: Danger.

#### **Hazard Statements (GHS-US)**

: H290 - May be corrosive to metals  
H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H318 - Causes serious eye damage  
H335 - May cause respiratory irritation  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects

#### **Precautionary Statements (GHS-US)**

: P234 - Keep only in original container.  
P260 - Do not breathe vapors, mist, spray.  
P261 - Avoid breathing fume/gas/mist/vapors/spray.  
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area.  
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.

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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.  
P312 - Call a POISON CENTER/doctor/physician if you feel unwell.  
P321 - Specific treatment (see section 4).  
P363 - Wash contaminated clothing before reuse.  
P390 - Absorb spillage to prevent material damage.  
P391 - Collect spillage.  
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.  
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:** May be corrosive to the respiratory tract. When heated to decomposition, emits toxic fumes. Contact with metals may evolve flammable hydrogen gas.

**Unknown Acute Toxicity (GHS-US)** Not available.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Substances

#### Mixture

Name of Hazardous Ingredients	Product identifier	% (w/w)	Classification (GHS-US)
Potassium hydroxide	(CAS No) 1310-58-3	10 - 25	Met. Corr. 1, H290 Acute Tox. 4 (Oral), H302 Skin Corr. 1A, H314 Eye Dam. 1, H318
Sodium hypochlorite	(CAS No) 7681-52-9	2.5 - 10	Met. Corr. 1, H290 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

## 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 several 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 severe skin burns. Causes serious eye damage. May cause irritation of respiratory tract.

**Inhalation:** May cause respiratory irritation.

**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.

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### **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 flammable.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Contact with soft metals may evolve flammable hydrogen gas.

### **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:** Potassium oxides. Sodium oxides. Hydrogen chloride.

**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 (vapors, mist, 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. Absorb spillage to prevent material damage.

### **Reference to Other Sections**

Refer to section 9 for flammability properties.

## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

**Additional Hazards When Processed:** When heated to decomposition, emits toxic fumes. May be corrosive to soft metals. Contact with soft 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 not 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, and incompatible materials.

**Incompatible Materials:** Strong acids. Soft metals. Nitrogen containing compounds, ammonium compounds.

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**Specific End Use(s):** Chlorinated alkaline detergent. For professional use only.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

Potassium hydroxide (1310-58-3)		
Mexico	OEL Ceiling (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
Mexico	OEL Ceiling (ppm)	5 ppm
USA ACGIH	ACGIH Ceiling (ppm)	2 ppm
USA OSHA	OSHA PEL (Ceiling) (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (Ceiling) (ppm)	5 ppm
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	7 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (ppm)	5 ppm
USA IDLH	US IDLH (ppm)	50 ppm
Ontario	OEL Ceiling (ppm)	2 ppm
Québec	PLAFOND (mg/m <sup>3</sup> )	7.5 mg/m <sup>3</sup>
Québec	PLAFOND (ppm)	5 ppm

#### 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. If user operations generate fumes, gas, vapors, spray, or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or regulatory limits.

**Personal Protective Equipment:** Protective clothing. Protective goggles. Gloves. Face shield.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**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 use. If airborne concentrations of vapor or mist are expected to exceed exposure limits, use NIOSH-approved respirator.

**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	: Violet
Odor	: Chlorine-like
Odor Threshold	: Not available
pH	: 12
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: 100°C (212°F)
Flash Point	: Not available
Auto-ignition Temperature	: Product is not self-igniting.
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available

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<b>Relative Vapor Density at 20°C (68°F)</b>	: Not available
<b>Specific Gravity</b>	: 1.268 g/cm <sup>3</sup>
<b>Solubility</b>	: Complete in water.
<b>Partition coefficient: n-octanol/water</b>	: Not available
<b>Viscosity</b>	: Not available
<b>Explosion Data – Sensitivity to Mechanical Impact</b>	: Not expected to present an explosion hazard due to mechanical impact.
<b>Explosion Data – Sensitivity to Static Discharge</b>	: Not expected to present an explosion hazard due to static discharge.

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Contact with soft 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. Soft metals. Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Sodium oxides, potassium oxides. Thermal decomposition generates: Toxic gases.

### 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 and eye damage. **pH:** 12

**Serious Eye Damage/Irritation:** Causes serious eye damage. **pH:** 12

**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):** May cause respiratory irritation.

**Aspiration Hazard:** Not classified.

**Symptoms/Injuries After Inhalation:** May cause respiratory irritation.

**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:**

<b>Potassium hydroxide (1310-58-3)</b>	
LD50 Oral Rat	214 mg/kg
ATE (oral)	333.000 mg/kg body weight
<b>Sodium hypochlorite (7681-52-9)</b>	
LD50 Oral Rat	8200 mg/kg
LD50 Dermal Rabbit	> 10000 mg/kg
<b>Sodium hypochlorite (7681-52-9)</b>	
IARC Group	3

### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity:** Very toxic to aquatic life with long lasting effects.

<b>Sodium hypochlorite (7681-52-9)</b>	
LC50 Fish 1	0.06 (0.06 - 0.11) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	0.033 - 0.044 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
LC 50 Fish 2	4.5 (4.5 - 7.6) mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

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EC50 Daphnia 2	0.033 (0.033 - 0.044) mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
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### Persistence and Degradability

<b>Smart CIP (AFCO 5544)</b>	
Persistence and Degradability	Not established.

### Bioaccumulative Potential

<b>Smart CIP (AFCO 5544)</b>	
Bioaccumulative Potential	Not established.

**Mobility in Soil** Not available.

### Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Sewage Disposal Recommendations:** Do not empty into drains; dispose of this material and its container in a safe way.

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations. RCRA Waste Code: D002 (Corrosive Material).

## SECTION 14: TRANSPORT INFORMATION

### 14.1 In Accordance with DOT

**Proper Shipping Name** : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide, sodium hypochlorite)  
**Hazard Class** : 8  
**Identification Number** : UN3266  
**Label Codes** : 8  
**Packing Group** : III  
**Marine Pollutant** : Yes  
**ERG Number** : 154



### 14.2 In Accordance with IMDG

**Proper Shipping Name** : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide, sodium hypochlorite)  
**Hazard Class** : 8  
**Identification Number** : UN3266  
**Packing Group** : III  
**Label Codes** : 8  
**EmS-No. (Fire)** : F-A  
**EmS-No. (Spillage)** : S-B  
**Marine Pollutant** : Yes



### 14.3 In Accordance with IATA

**Proper Shipping Name** : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide, sodium hypochlorite)  
**Packing Group** : III  
**Identification Number** : UN3266  
**Hazard Class** : 8  
**Label Codes** : 8  
**ERG Code (IATA)** : 8L



### 14.4 In Accordance with TDG

**Proper Shipping Name** : CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (Potassium hydroxide, sodium hypochlorite)  
**Packing Group** : III  
**Hazard Class** : 8  
**Identification Number** : UN3266  
**Label Codes** : 8



## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

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<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard. Delayed (chronic) health hazard.
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<b>Potassium hydroxide (1310-58-3)</b>
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Listed on the United States TSCA (Toxic Substances Control Act) inventory.
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<b>Sodium hypochlorite (7681-52-9)</b>
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Listed on the United States TSCA (Toxic Substances Control Act) inventory.
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### US State Regulations

<b>Potassium hydroxide (1310-58-3)</b>
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U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Acute. U.S. - California - SCAQMD - Toxic Air Contaminants - Non-Cancer Chronic. 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 - Environmental Hazardous Substances List. RTK - U.S. - New Jersey - Right to Know Hazardous Substance List. U.S. - New Jersey - Special Health Hazards Substances List. U.S. - New Jersey - TCPA - Extraordinarily Hazardous Substances (EHS). U.S. - New York - Occupational Exposure Limits - Ceilings. 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.
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<b>Sodium hypochlorite (7681-52-9)</b>
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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 - 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.
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### Canadian Regulations

<b>Potassium hydroxide (1310-58-3)</b>
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Listed on the Canadian DSL (Domestic Substances List) inventory.
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<b>Sodium hypochlorite (7681-52-9)</b>
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Listed on the Canadian DSL (Domestic Substances List) inventory.
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## **SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION**

**Revision date** : 9/21/2018  
**Other Information** : 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:**

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4.
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1.
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3.
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1.
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3.
Eye Dam. 1	Serious eye damage/eye irritation Category 1.
Met. Corr. 1	Corrosive to metals Category 1.
Skin Corr. 1A	Skin corrosion/irritation Category 1A.
Skin Corr. 1B	Skin corrosion/irritation Category 1B.

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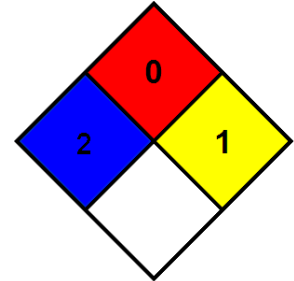
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

STOT SE 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.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**NFPA Health Hazard** : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is 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** : 2 Moderate Hazard - Temporary or minor injury may occur.

**Flammability** : 0 - Minimal Hazard.

**Physical** : 1 - Slight Hazard.

### Party Responsible for the Preparation of This Document

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*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.*

North America GHS SDS 2015 (U.S., Can., Mex.)