

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Form:** Mixture

**Product Name:** Hydragenix™ ALF (AFCO 5753)

**Product Code:** AFCO 5753

### Intended Use of the Product

**Use of the Substance/Mixture:** Acid cleaner. 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.afcoecare.com](http://www.afcoecare.com)

### Emergency Telephone Number

**Emergency Number** : 1-800-424-9300 (CHEMTREC)

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the Substance or Mixture

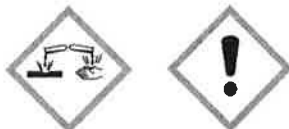
#### Classification (GHS-US)

Met. Corr. 1	H290
Acute Tox. 4 (Dermal)	H312
Skin Corr. 1A	H314
Eye Dam. 1	H318

### Label Elements

#### GHS-US Labeling

#### Hazard Pictograms (GHS-US)



#### Signal Word (GHS-US)

: Danger.

#### Hazard Statements (GHS-US)

: H290 - May be corrosive to metals.  
H312 - Harmful in contact with skin.  
H314 - Causes severe skin burns and eye damage.  
H318 - Causes serious eye damage.

#### Precautionary Statements (GHS-US)

: P234 - Keep only in original container.  
P260 - Do not breathe vapors, mist, spray.  
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.  
P280 - Wear protective gloves, protective clothing, eye protection, face protection.  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P302+P352 - IF ON SKIN: wash with plenty of water.  
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).  
P362+P364 - Take off contaminated clothing and wash it 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. Contact with metals may evolve flammable hydrogen gas. Contains an oxidizing material which may accelerate fire.

**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	69 – 89.5	Not classified
Methanesulfonic acid	(CAS No) 75-75-2	10 - 30	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 1, H335 Aquatic Acute 2, H402
Sulfuric acid	(CAS No.) 7664-93-9	0.5-1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

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).

**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. Obtain medical attention.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Get immediate medical advice/attention. Wash contaminated clothing before reuse.

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

**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:** Causes serious eye damage. Harmful in contact with skin. Corrosive to eyes system and skin.

**Inhalation:** None under normal and intended conditions of use.

**Skin Contact:** Causes severe skin burns. Harmful in contact with skin.

**Eye Contact:** Causes serious eye damage.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe irritation progressing quickly to chemical burns.

**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.

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### 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:** Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes. Toxic gas. Corrosive to metals. Explosive hydrogen gas. Contains an oxidizing material which may accelerate fire.

### 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:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Oxides of sulfur.

**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 allow product to spread into the environment. 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.

**Methods for Cleaning Up:** Clear up spills immediately and dispose of waste safely. Contact competent authorities after a spill.

### 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. Corrosive vapors are released. Contact with metals may evolve flammable hydrogen gas. Contains an oxidizing material which may accelerate fire.

**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.

### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high or low temperatures, direct sunlight, heat, ignition sources, organic materials, combustible materials, incompatible materials.

**Incompatible Materials:** Bases. Amines. Metals. Copper. Strong oxidizers. Strong reducing agents.

**Special Rules on Packaging:** Keep only in original container.

**Specific End Use(s):** Non-phosphated acid cleaner for CIP cleaning in food processing plants. For professional use only.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

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### Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Alarm detectors should be used when toxic gases may be released. If user operations generate fumes, vapors, gas, or spray 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 goggles. Protective clothing. 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 product use. Whenever worker exposure may exceed established regulatory exposure limits, use a NIOSH-approved respirator.

**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 Red
Odor	: Not available
Odor Threshold	: Not available
pH	: <1
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: None
Auto-ignition Temperature	: None
Decomposition Temperature	: 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°C	: Not available
Specific Gravity	: 1.05
Solubility	: Complete.
Partition coefficient: 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:** Thermal decomposition generates: Corrosive vapors. When heated to decomposition, emits toxic fumes. Toxic Gas. Corrosive to metals.

**Chemical Stability:** Stable under normal conditions.

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

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures.

**Incompatible Materials:** Bases. Amines. Metals. Copper. Strong oxidizers. Strong reducing agents.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>). Oxides of sulfur.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Harmful in contact with skin.

**LD50 and LC50 Data:** Not available.

**Skin Corrosion/Irritation:** Causes severe skin burns. (pH: <1)

**Serious Eye Damage/Irritation:** Causes serious eye damage. (pH:<1)

**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.

**Symptoms/Injuries After Inhalation:** None under normal and intended conditions of use.

**Symptoms/Injuries After Skin Contact:** Causes severe skin burns. Harmful in contact with skin.

**Symptoms/Injuries After Eye Contact:** Causes serious eye damage.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects. Contact may cause immediate severe irritation progressing quickly to chemical burns.

#### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

Water (7732-18-5)	
LD50 Oral Rat	>90000 mg/kg
Methanesulfonic acid (75-75-2)	
LC50 Oral Rat	380 mg/kg
LC50 Dermal Rabbit	200 mg/kg

### SECTION 12: ECOLOGICAL INFORMATION

**Toxicity** Not classified.

Hydragenix™ ALF (AFCO 5753)	
LC50 Fish	467 mg/l (Exposure time: 48 h - Species: Fathead minnow)
EC50 Daphnia	395 mg/l (Exposure time: 48 h - Species: Daphnia magna)
Methanesulfonic acid (75-75-2)	
LC50 Fish 1	73 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	70 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

**Persistence and Degradability** Not available.

#### Bioaccumulative Potential

Hydragenix™ ALF (AFCO 5753)	
Bioaccumulative Potential	Not established.

**Mobility in Soil** Not available.

#### Other Adverse Effects

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

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## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 In Accordance with DOT

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (METHANE SULFONIC ACID)  
**Hazard Class** : 8  
**Identification Number** : UN3265  
**Label Codes** : 8  
**Packing Group** : II  
**ERG Number** : 154



### 14.2 In Accordance with IMDG

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (METHANE SULFONIC ACID)  
**Hazard Class** : 8  
**Identification Number** : UN3264  
**Packing Group** : II  
**Label Codes** : 8  
**EmS-No. (Fire)** : F-A  
**EmS-No. (Spillage)** : S-B



### 14.3 In Accordance with IATA

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (METHANE SULFONIC ACID)  
**Packing Group** : II  
**Identification Number** : UN3265  
**Hazard Class** : 8  
**Label Codes** : 8  
**ERG Code (IATA)** : 8L



### 14.4 In Accordance with TDG

**Proper Shipping Name** : CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (METHANE SULFONIC ACID)  
**Packing Group** : II  
**Hazard Class** : 8  
**Identification Number** : UN3265  
**Label Codes** : 8



## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

<b>Hydragenix™ ALF (AFCO 5753)</b>	
<b>SARA Section 311/312 Hazard Classes</b>	Immediate (acute) health hazard.
<b>Water (7732-18-5)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	
<b>Methanesulfonic acid (75-75-2)</b>	
Listed on the United States TSCA (Toxic Substances Control Act) inventory.	

### US State Regulations

<b>Methanesulfonic acid (75-75-2)</b>
RTK - U.S. - New Jersey - Right to Know Hazardous Substance List.
RTK - U.S. - Pennsylvania - RTK (Right to Know) List.

### Canadian Regulations

<b>Water (7732-18-5)</b>
Listed on the Canadian DSL (Domestic Substances List) inventory.

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### Methanesulfonic acid (75-75-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

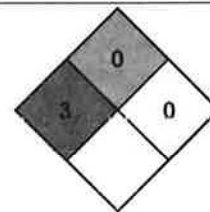
## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

- Revision date** : 10/16/20  
**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:

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.
Ox. Liq. 3	Oxidizing liquids Category 3.
Skin Corr. 1A	Skin corrosion/irritation Category 1A.
Skin Corr. 1B	Skin corrosion/irritation Category 1B.
H272	May intensify fire; oxidizer.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

- 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** : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



### HMIS III Rating

- Health** : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given.  
**Flammability** : 0 - Minimal Hazard.  
**Physical** : 0 - Minimal Hazard.

### Party Responsible for the Preparation of This Document

Alex C. Fergusson, LLC.  
800 Development Avenue  
Chambersburg, PA 17201  
T: 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.*

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