SAFETY DATA SHEET

Version 1

1. Identification of the Substance / Preparation and of the Company / Undertaking

Product Name: pH Down LO
UN/ID No UN1789
Company Name:
Hawkins, Inc. 3100 E. Hennepin Avenue Minneapolis, MN 55413 (612-331-6910)

Emergency Telephone:
CHEMTREC (US): 1-800-424-9300

2. Hazards Identification

GHS - Classification

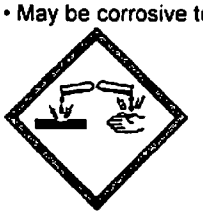
Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Gases)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 1
Skin corrosion/irritation	Category 1 Category 1A
Serious eye damage/eye irritation	Category 1
Respiratory sensitization	Category 1A
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1

Signal Word: **Danger**
Hazard Statements:
- Toxic if swallowed
- Fatal if inhaled
- Causes severe skin burns and eye damage
- May cause allergy or asthma symptoms or breathing difficulties if inhaled
- Causes damage to organs
- Causes damage to organs through prolonged or repeated exposure

Physical Hazards

Corrosive to metals	Category 1

- May be corrosive to metals



Precautionary Statements:
- P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- P330 - Rinse mouth
- P311 - Call a POISON CENTER or doctor/physician
- P271 - Use only outdoors or in a well-ventilated area
- P284 - Wear respiratory protection
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed
- 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
- P363 - Wash contaminated clothing before reuse
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- P280 - Wear protective gloves/protective clothing/eye protection/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
- P310 - Immediately call a POISON CENTER or doctor/physician
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
- P285 - In case of inadequate ventilation wear respiratory protection
- P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
- P307 + P311 - IF exposed: Call a POISON CENTER or doctor/physician
- P321 - Specific treatment (see supplemental first aid instructions on this label)
- P405 - Store locked up
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P270 - Do not eat, drink or smoke when using this product
- P314 - Get medical advice/attention if you feel unwell
- P273 - Avoid release to the environment
- P501 - Dispose of contents/ container to an approved waste disposal plant
- P334 - Immerse in cool water/wrap in wet bandages
- P390 - Absorb spillage to prevent material damage
- P406 - Store in corrosive resistant aluminum container with a resistant inliner

3. Composition / Information on Ingredients

Hazardous

Chemical Name	CAS No	Weight-%	EC No
Trade Secret	-	Proprietary	Listed

4. First Aid Measures

General Advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye Contact: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

Skin Contact: Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Immediate medical attention is not required.

Inhalation: Move to fresh air. Obtain medical attention. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Artificial respiration and/or oxygen may be necessary. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Ingestion:	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.
Note to Physicians:	Treat symptomatically.
Self-protection of the First Aider:	Use personal protective equipment as required.

5. Fire-fighting Measures

Flammable Properties:
Not considered to be a fire hazard; May react with metals or heat to release flammable hydrogen gas

Explosive Properties:
Not considered to be an explosion hazard

Suitable Extinguishing Media:
Water; Water spray (fog); Neutralize with soda ash or slaked lime

Unsuitable Extinguishing Media:
No information available

Protective Equipment and Precautions for Firefighters:
In the event of a fire, wear full protective clothing and MSHA/NIOSH (approved or equivalent) self-contained breathing apparatus with full facepiece operated in the pressure-demand or other positive pressure mode; Structural firefighter's protective clothing is ineffective for fires involving this material; Stay away from ends of tanks; Cool containers with flooding quantities of water until well after fire is out

6. Accidental Release Measures

Personal Precautions:	Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
Environmental Precautions:	Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.
Methods for Cleaning Up:	Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up.
Other Information:	Not applicable.

7. Handling and Storage

Advice on Safe Handling:	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.
Storage Conditions:	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.
Incompatible Materials:	A strong mineral acid, concentrated hydrochloric acid is highly reactive with Strong bases, Metals, Metal oxides, Hydroxides, Amines, Carbonates and other Alkaline materials. Incompatible with materials such as Cyanides, Sulfides, Sulfites and Formaldehyde.

8. Exposure Controls / Personal Protection

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	Ontario TWA
Trade Secret	Ceiling: 2 ppm	5 ppm Ceiling 5 ppm Ceiling 7 mg/m³ Ceiling 7 mg/m³ Ceiling	CEV: 2 ppm

Chemical Name	European Union	China	Japan	Korea	Australia	Taiwan
Trade Secret	TWA 5 ppm TWA 8 mg/m³ STEL 10 ppm STEL 15 mg/m³	Ceiling: 7.5 mg/m³ Ceiling	Ceiling: 5 ppm Ceiling: 7.5 mg/m³	STEL: 2 ppm STEL: 3 mg/m³ TWA: 1 ppm TWA: 1.5 mg/m³	5 ppm Peak 7.5 mg/m³ Peak	

Exposure Guidelines Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992)

Engineering Controls: Ensure adequate ventilation, especially in confined areas

Personal protective equipment (PPE)

Eye/Face Protection: Tight sealing safety goggles. Face protection shield.

Body Protection: Suitable protective clothing. Apron. Gloves made of plastic or rubber.

General Hygiene Considerations:

Wash contaminated clothing before reuse. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid

Appearance: Clear liquid

Color: Colorless

Odor: Pungent

Odor Threshold: No information available

Property	Values	Remarks • Method
pH:		No information available
"Salt Out" Point (°F):		No information available
Melting Point/Freezing Point:		
Boiling Point/Boiling Range:	81 °C / 178 °F	
Flash Point:		No information available
Evaporation Rate (BuAc=1):		No information available
Flammability (solid, gas):		No information available
Flammability Limits in Air:		No information available
Upper Flammability Limit:		
Lower Flammability Limit:		
Vapor Pressure (mm Hg) :		No information available
Vapor density (Air =1)		No information available
Specific Gravity (H_2O=1):		No information available
Specific Gravity (2nd value):		No information available
Water Solubility:		
Solubility(ies):	Infinitely soluble	
Partition Coefficient (n-octanol/water)		No information available
Autoignition Temperature:		
Decomposition Temperature:		No information available
Kinematic Viscosity:		No information available
Dynamic Viscosity:		No information available
Oxidizing Properties:	No information available	
Explosive Properties:	Not considered to be an explosion hazard	

9.2. Other information

Softening Point: No information available

Molecular Weight: No information available

VOC Content(%): No information available

Density: Approx. 1.12
Bulk Density: No information available

10. Stability and Reactivity

Stability: Stable under normal conditions of use and storage

Conditions to Avoid: Heat, flames and sparks; Direct sunlight

Incompatible Materials: A strong mineral acid, concentrated hydrochloric acid is highly reactive with Strong bases, Metals, Metal oxides, Hydroxides, Amines, Carbonates and other Alkaline materials. Incompatible with materials such as Cyanides, Sulfides, Sulfites and Formaldehyde.

Hazardous Decomposition Products: Emits toxic hydrogen chloride fumes when heated to decomposition; Thermal oxidative decomposition produces toxic chlorine fumes and explosive hydrogen gas

Possibility of Hazardous Reactions: Will react with water or steam to produce heat and toxic, corrosive fumes

11. Toxicological Information

Product Information

Acute Toxicity: 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

Chemical Name	Oral LD_{50} :	Dermal LD_{50} :	LC_{50} (Lethal Concentration):
Trade Secret	700 mg/kg (Rat)	5010 mg/kg (Rabbit)	3124 ppm (Rat) 1 h

Chronic Toxicity:

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	IARC
Trade Secret	3

IARC (International Agency for Research on Cancer)
Not classifiable as a human carcinogen

Target Organ Effects: Eyes, Respiratory system, Skin

12. Ecological Information

Ecotoxicity

76.5% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Trade Secret		*282. 96 h Gambusia affinis mg/L LC50 static*	

Persistence and Degradability: No information available.

Bioaccumulation: No information available.

Mobility: No information available.

13. Disposal Considerations

Waste from Residues/Unused Products: Disposal should be in accordance with applicable regional, national and local laws and regulations

14. Transport Information

DOT

Proper shipping name	HYDROCHLORIC ACID
Hazard Class	8
UN/ID No	UN1789
Packing Group	II
Description	UN1789, HYDROCHLORIC ACID, 8, PG II

15. Regulatory Information

International Inventories

All of the components in the product are on the following Inventory lists: TSCA (United States):, Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), South Korea (KECL):, China (IECSC), ENCS (Japan):, Philippines (PICCS), This product contains a substance not listed on international inventories - it is for research and development use only.

AICS	Complies
TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies

Chemical Name	AICS	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS
Trade Secret	Listed	Listed	Listed	-	Listed	-	(1)-215	Listed	KE-20189	Present

Inventory Legend

AICS - Australian Inventory of Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

RESTRICTIONS - REACH TITLE VII No information available

US Federal Regulations

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	CERCLA Hazardous Substances and the Reportable Quantities	SARA Extremely Hazardous Substances EPCRA RQ	SARA Extremely Hazardous Substances TPQ
Trade Secret	5000 lb 2270 kg	5000 lb EPCRA RQ (gas only)	500 lb TPQ

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Trade Secret	1.0

SARA 311/312 Hazard Categories

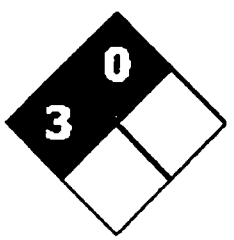
Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive hazard	No

U.S. State Right-to-Know Regulations

California Proposition 65:
This product does not contain any Proposition 65 chemicals

16. Other Information

National Fire Protection Association (NFPA) Ratings



Prepared By: HSE Department

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Revision Date: 11-Jun-2012

Revision Note: MSDS converted to GHS SDS Format.

Disclaimer:
Please be advised that it is your responsibility to inform your employees of the hazards of this substance, to advise them of what these properties mean and be sure they understand exposure information. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication.

The information presented herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge. No warranty or guaranty, express or implied, is made regarding performance, stability, or otherwise. This information is not intented to be all-inclusive as to the manner and conditions of use, handling, and storage. Other factors may require additional safety or performance considerations. While our technical personnel will be happy to respond to questions regarding safe handling and use procedures, the handling and use remains the responsibility of the consumer. No suggestions are intended as, and should not be constructed as, a recommendation to infringe on any existing patents or to violate any Federal, State, or local laws.

End of Safety Data Sheet