

SAFETY DATA SHEET

Version 1

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

Product Name: pH Down LO
 UNID 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

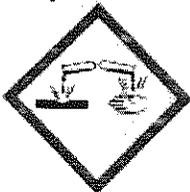
Hazard Statements:

- 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/m ³ Ceiling 7 mg/m ³ Ceiling | | CEV: 2 ppm | |
| Chemical Name | European Union | China | Japan | Korea | Australia | Taiwan | |
| Trade Secret | TWA 5 ppm TWA 8 mg/m ³ STEL 10 ppm STEL 15 mg/m ³ | Ceiling: 7.5 mg/m ³ Ceiling | Ceiling: 5 ppm Ceiling: 7.5 mg/m ³ | STEL: 2 ppm STEL: 3 mg/m ³ TWA: 1 ppm TWA: 1.5 mg/m ³ | 5 ppm Peak 7.5 mg/m ³ 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 | Odor: | Pungent |
| Appearance: | Clear liquid | Odor Threshold: | No information available |
| Color: | Colorless | | |
| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> | |
| 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 ₂ O=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 component(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 <i>Gambusia affinis</i> 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/NDL), 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/NDL: Complies
 EINECS/ELINCS: Complies
 ENCS: Complies
 IECSC: Complies
 KECL: Complies
 PICCS: Complies

| Chemical Name | AICS | TSCA | DSL | NDL | 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/NDL - 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

32345 pH Down LO

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 |

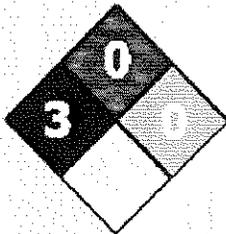
U.S. State Right-to-Know Regulations

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
Issue Date: 15-Mar-2013
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 intended 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