



SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

1.1 Product Identifier

Product Name: Micro Clean Step I Cleaner

Product Code: 13760,13764

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Uses: Cleaning solution

1.3 Details of the supplier of the safety data sheet

Company Identification:

Hawk Research Laboratories, LLC.

7150 Capitol Drive

Wheeling, IL 60090

Telephone: 630.227.0050

Email: info@hawklabs.com

Customer information:

Supplied by:

+353 86 100 1972

safety@hawklabs.com

1.4 Emergency Telephone Number

24-Hour Contact: +1.813.248.0585

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Classification	Category	Hazard Code
Acute Toxicity: Oral	5	H303
Skin Corrosion	1	H314
Eye Damage	1	H318
Acute Toxicity: Inhalation	4	H332

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

Hazard Symbols (Pictograms):



Signal Word: DANGER



Hazard statements:

- H303: May be harmful if swallowed
- H314: Causes severe skin burns and eye damage
- H318: Causes serious eye damage
- H332: Harmful if inhaled

Precautionary Statements:

Prevention:

- P260: Do not breathe dust/fume/gas/mist/vapors/spray.
- P264: Wash thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
- P271: Use only outdoors or in a well-ventilated area.

Response:

- P312: Call a POISON CENTER/doctor if you feel unwell.
- P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P363: Wash contaminated clothing.
- P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P310: Immediately call a POISON CENTER/doctor.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

- P405: Store locked up.

Disposal:

- P501: Dispose of contents/container to an approved waste disposal plant.

Contains: Phosphoric Acid, Hydrochloric Acid, Oxalic Acid

2.3 Other hazards

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

This product is a mixture.

Chemical Name	CAS Number	EC Number Index Number	Weight%	Classification
Phosphoric Acid	7664-38-2	231-633-2	5-10	Corrosive to metals 1 H290 Skin Irritant 1B H314 Eye Irritant 1 H318
Hydrochloric Acid	7647-01-0	231-595-7	1-5	Corrosive to metals 1 H290 Skin Irritant 1B H314 Eye Irritant 1 H318 STOT SE 3 H335



Oxalic Acid	144-62-7	205-634-3	1-5	Acute tox 4 H302 H312 Eye Irritant 1 H318
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The exact percentage is withheld as trade secret. Other components are below reportable levels or are non-hazardous.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice: First aid responders should use the recommended protective clothing. Refer to Section 8 for specific personal protective equipment.

Inhalation: Remove to fresh air. Call a physician or poison control center immediately. If not breathing, begin CPR. If breathing is difficult, give oxygen.

Eye Contact: Immediate attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eyes wide open while rinsing. Do not rub affected area.

Skin Contact: Wash off immediately with soap and water while removing all contaminated clothing and shoes.

Ingestion: Do not induce vomiting. Clean mouth with water and drink plenty of water. Never give anything by mouth to an unconscious person. Remove from exposure and lie down. Call a physician or poison control center immediately.

4.2 Most important symptoms and effects, both acute and delayed

Aside from the information found under the First Aid Measures (above) and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicological Information

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically. No specific antidote available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Use media appropriate for surrounding environment.

5.2 Special hazards arising from the substance/mixture

Thermal decomposition may lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion, do not breathe fumes.

5.3 Advice for firefighters

Wear self-contained breathing apparatus pressure-demand, NIOSH/MSHA (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES



6.1 Personal precautions, protective equipment, and emergency procedures

Immediately turn off or isolate any sources of ignition (pilot lights, electrical equipment, flames, heaters, etc.). Evacuate area and ventilate. Only trained and properly protected personnel should be involved in clean up procedures. Use appropriate safety equipment.

6.2 Environmental precautions

Do not allow substance to enter soil, ditches, sewers, waterways or groundwater. CAUTION: If spilled material is cleaned up using a regulated solvent, the resulting waste mixture will also be regulated.

6.3 Methods and materials for containment and cleaning up

Personnel wearing proper protective equipment should contain spill immediately with inert materials (sand, earth, chemical spill pads of cotton) by forming dikes. Dikes should be placed to contain spill in a manner that will prevent material from entering sewers and waterways. Large spills, once contained, may be picked up using explosion-proof, non-sparking vacuum pumps, shovels, or buckets, and disposed of in suitable containers. If a large spill occurs, notify the appropriate authorities. In case of spill or accident, contact CHEMTEL at +1.813.248.0585.

6.4 Reference to other sections

References to other sections, have been cited in previous subsections.

SECTION 7: HANDLING AND STORAGE

7.1 Safe handling

Open containers carefully and in a well-ventilated area, using appropriate respiratory protection. Wash hands thoroughly after handling. Keep containers closed when not in use. Do not transfer to unmarked containers. Empty containers may contain product residue which may exhibit hazardous properties; therefore, do not pressurise, cut, glaze, weld or use for any other purpose.

7.2 Conditions for safe storage

Store in a cool, dry, well-ventilated area. Keep containers tightly closed and store away from heat, sparks, open flame, or oxidising materials. Extended storage at excessive temperatures may produce odorous and toxic fumes from product decomposition.

7.3 Specific end uses

See technical data sheet on this product for further information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Chemical Name	Regulation	Type of Listing	Value
Phosphoric Acid	ACGIH	TWA	3 mg/m ³
Hydrochloric Acid	ACGIH	STEL	5 ppm
Oxalic Acid	NIOSH	TWA	1 mg/m ³

8.2 Exposure controls

Avoid creating dust or mist. Local exhaust ventilation, process enclosures, or other engineering controls are required when handling or using this product to avoid overexposure. Use explosion-proof ventilation



equipment. Do not use in closed and confined spaces. Keep all levels below exposure limits. Perform regular monitoring to ensure exposure limits are not exceeded.

Personal Protective Equipment (PPE)

Eye/Face Protection:

Use safety eyewear with splash guards and side shields. Use additional eye protection, such as chemical safety goggles when the possibility for eye contact from splashing, spraying liquid, or airborne material exists.

Skin Protection:

Avoid contact with this product. Wear appropriate protective gloves and clothing to prevent skin exposure. Use proper glove and clothing removal techniques to avoid skin contact with this product. When handling large quantities, eye wash stations and deluge showers should be available.

Respiratory Protection:

Do not breathe vapors. When concentrations exceed the established limits, wear an appropriate, properly fitted respiratory until vapors are exhausted. Use of an air-purifying or positive-pressure self-contained breathing apparatus is recommended. For emergency situations, use a positive-pressure self-contained breathing apparatus.

General Hygiene Measures:

When using this product, do not eat or drink. Wash hands with soap and water before breaks and at the end of each workday. Avoid contact with contaminated clothing and protective clothing. Wash before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties

Appearance (Physical State/Colour):	Liquid/clear green
Odor:	Acidic
Odor Threshold:	Not determined
pH	<1
Melting Point:	Not determined
Boiling Point:	99°C
Flash Point:	Not flammable
Evaporation Rate:	Not determined
Flammability (solid, gas)	Not applicable to liquids
Lower and Upper Explosive Limits:	Not determined
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Relative Density:	1.05
Solubility:	Complete
Partition Coefficient: n-octanol/water:	Not determined
Auto-ignition Temperature:	Not determined
Viscosity:	Not determined
Explosive Properties:	No data available
Oxidising Properties:	No data available

9.2 Other information

Molecular Weight:	No data available
Molecular Formula:	Not applicable (mixture)



SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur

10.4 Conditions to avoid

Exposure to air and moisture over prolonged periods

10.5 Incompatible materials

Strong acids, strong bases, strong oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition may lead to release of irritating and toxic gases and vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Acute Oral Toxicity: LD50 1530 mg/kg (rat) – phosphoric acid

Acute Dermal Toxicity: LD50 2740 mg/kg (rabbit) – phosphoric acid

Acute Inhalation Toxicity: LC50 > 850 mg/m³ (rat 1 hour) – phosphoric acid

Skin corrosion/irritation: Causes severe skin burns

Serious eye damage/eye irritation: Causes serious eye damage

Respiratory or skin sensitization: Harmful if inhaled

Germ Cell Mutagenicity: No data available

Carcinogenicity: The following chemical(s) comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by the National Toxicology Program (NTP) or the International Agency for Research on Cancer (IARC):

CAS Number	Chemical Name	Carcinogen Rating
None		

Reproductive toxicity: No data available

Specific target organ system toxicity:

Single exposure: Harmful if inhaled

Repeated exposure: No data available

Aspiration hazard: No data available



SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Component Ecotoxicity

Phosphoric Acid	96h Gambusia affinis LC50 3-3.5 mg/L 12h Daphnia magna EC50 4.6 mg/L
Hydrochloric Acid	96h Gambusia affinis LC50 282 mg/L
Oxalic Acid	24h Lepomis macrochirus LC50 4000 mg/L (static) 48h Daphnia magna EC50 125-150 mg/L (static)

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

Oxalic Acid Partition coefficient -0.81

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This product has not been assessed for persistence, bioaccumulation and toxicity.

12.6 Other adverse effects

None known

12.7 Additional information

No other information available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

This product, when being disposed of in its unused and uncontaminated state, should be treated as a hazardous waste when disposed according to Directive 2008/98/EC. Disposal practices must comply with all national and provincial laws, including those governing hazardous waste. Waste characterisations and compliance shall be determined by the waste generator. Dispose of in a licensed facility.

Do not discharge product into sewer system, on the ground or into any body of water.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number	UN1760
14.2 UN proper shipping name	Corrosive Liquids, N.O.S. (Contains Phosphoric and Hydrochloric Acid)



14.3	Transport hazard class(es)	Class 8
14.4	Packing group	PGII
14.5	Environmental hazards	Not considered environmentally hazardous based on available data
14.6	Special precautions for users	No data available
14.7	Bulk transport information	Consult IMO regulations before transporting ocean bulk

This information is not intended to cover all specific regulatory or operational requirements relating to this product. Transportation classifications may vary by container volume and may be influenced by country regulations. Additional transportation information can be obtained through a customer service representative.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH Regulation (EC) No 1907/2006

This product contains only components that have either been preregistered, registered, exempt from registration, regarded as registered, or not subject to registration according to Regulation (EC) No 1907/2006 (REACH). Polymers are exempted from REACH registration.

15.2 Chemical safety assessment

Not applicable

SECTION 16: OTHER INFORMATION

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, Hawk Research Laboratories, LLC (Seller) makes no representations as to the completeness or accuracy thereof. Seller has prepared this document using data from sources considered to be technically reliable and accurate. Information is supplied upon the condition that persons receiving it will make their own determination as to its suitability for their purpose prior to use. In no event will Seller be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. No representations or warranties either expressed or implied, or merchantability, fitness for a particular purpose in any other nature are made hereunder with respect to information for the product to which information refers.

Recommended use of the chemical and restrictions of use:

Because many of the conditions are within the user's knowledge and control, it is essential that the user evaluate and determine whether the product is suitable and appropriate for an intended application, and complies with all local applicable laws, regulations, standards, and guidance.