HAWK RESEARCH LABORATORIES, LLC.
High Performance Coating Systems

SAFETY DATA SHEET

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

1.1 Product Identifier

Product Name: Micro Clean Step II Cleaner

Product Code: 13750, 13754

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

Supplied by:

Customer information: +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
Specific Target Organ Toxicity: Single Exposure	3	H336

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
H336: May cause drowsiness or dizziness

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.
P403+P233: Store in a well-ventilated place. Keep container tightly closed.

Disposal:

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

Contains: 2-Butoxyethanol, Monoethanolamine, Potassium Hydroxide, Trisodium Nitriloacetate

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
2-Butoxyethanol	111-76-2	203-905-0	7-13	Flammable liquid 4 H227 Acute tox 4 H302 H312 H332 Skin irritant 2 H315 Eye irritant 2A H319
Monoethanolamine	141-43-5	205-483-3	5-10	Flammable liquid 4 H227

				Acute tox 4 H302 H312 H332 Skin irritant 1B H314 Eye irritant 1 H318 STOT SE 3 H335
Potassium Hydroxide	1310-58-3	215-181-3	1-5	Corrosive to metals 1 H290 Acute tox 4 H302 Skin irritant 1A H314 Eye irritant 1 H318 Acute aquatic 3 H402
Trisodium Nitriloacetate	5064-31-3	225-768-6	<0.1%	Acute tox 4 H302 Eye irritant 2A H319 Carcinogenicity 2 H351

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
2-Butoxyethanol	ACGIH	TWA	20 ppm
Monoethanolamine	ACGIH	TWA	3 ppm
Potassium Hydroxide	ACGIH	Ceiling	2 mg/m^3
Trisodium Nitriloacetate	None	None	None

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 remove 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 yellow
Odor:	Solvent
Odor Threshold:	Not determined
pH	>13.0
Melting Point:	Not determined
Boiling Point:	Not determined
Flash Point:	>60°C
Evaporation Rate:	<1
Flammability (solid, gas)	Not applicable to liquids
Lower and Upper Explosive Limits:	Not determined
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Relative Density:	1.03
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 470 mg/kg (rat) – 2-butoxyethanol
Acute Dermal Toxicity:	LD50 99 mg/kg (rabbit) - 2-butoxyethanol
Acute Inhalation Toxicity:	LC50 450 ppm (rat 4h) - 2-butoxyethanol

Skin corrosion/irritation: Causes severe skin burns

Serious eye damage/eye irritation: Causes serious eye damage

Respiratory or skin sensitization: May cause drowsiness or dizziness

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: May cause drowsiness or dizziness
Repeated exposure:

Aspiration hazard: No data available

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Component	Ecotoxicity
2-Butoxyethanol	96h Lepomis marcochirus LC50 1490 mg/L (static) 48h Daphnia magna EC50 1000 mg/L
Monoethanolamine	96h Lepomis marcochirus LC50 300-1000 mg/L (static) 48h Daphnia magna EC50 65 mg/L
Potassium Hydroxide	96h Gambusia affinis LC50 80 mg/L (static)
Trisodium Nitriloacetate	96h Oncorhynchus mykiss LC50 72-133 mg/L (static) 48h Daphnia magna EC50 560-1000 mg/L

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
Monoethanolamine partition coefficient -1.91

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
This product has 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 Potassium Hydroxide and Ethanolamine)
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.