



Safety Data Sheet

Section 01 - Identification

Product Identifier	FilterClean F
Other Means of Identification	None
Product Use and Restrictions on Use	Cleaner used to remove heavy surface deposits from water tanks and filtration basins.
Initial Supplier Identifier	ClearTech Industries Inc. 1500 Quebec Avenue Saskatoon, SK. Canada S7K 1V7
Prepared By	ClearTech Industries Inc. Technical Writer Phone: 1 (800) 387-7503
24-Hour Emergency Phone	Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification

Acute Toxicity-Oral	Category 4
Acute Toxicity-Inhalation	Category 4
Skin Corrosion/Irritation	Category 1B
Serious Eye Damage/Irritation	Category 1
STOT-Single Exposure	Category 3

Physical Hazards

Corrosive to Metals	Category 1
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Danger

Hazards Statements

- H302 – Harmful if swallowed.
- H332 – Harmful if inhaled.
- H314 – Causes severe skin burns and eye damage.
- H335 – May cause respiratory irritation.
- H290 – May be corrosive to metals.

Pictograms



Precautionary Statements

P405 – Store locked up.

P234 – Keep only in original container.

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

P280 – Wear protective gloves, protective clothing, eye protection, and face protection.

P270 – Do not eat, drink or smoke when using this product.

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.

P363 – Wash contaminated clothing before reuse.

P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P260 – Do not breathe mist, vapours or spray.

P271 – Use only outdoors or in a well-ventilated area.

P304 + P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 – Immediately call a POISON CENTER or doctor/physician.

P390 – Absorb spillage to prevent material damage.

P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act

Section 03 - Composition / Information on Ingredients

Chemical Name	CAS Number	Weight %	Unique Identifiers
Sodium bisulfate	7681-38-1	1-10.5%	
Citric acid	77-92-9	1.5-15.5%	
Hydroxyacetic acid	79-14-1	5.1-20.1%	
Phosphoric acid	7664-38-2	1.5-13.5%	
Hydrochloric acid	7647-01-0	1-10.5%	

Section 04 - First Aid Measures

Inhalation	Remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek immediate medical attention.
Skin Contact / Absorption	Remove contaminated clothing. Rinse skin with lukewarm, gently flowing water for 30 minutes. Seek immediate medical attention. Store the contaminated clothing under water and wash before re-use or discard.
Eye Contact	Immediately flush eye(s) with lukewarm, gently flowing water for 30 minutes while forcibly holding the eyelid(s) open to ensure complete irrigation of the eye tissue. If a contact lens is present, remove only if easy to do so. Seek immediate medical attention.
Ingestion	DO NOT induce vomiting. If vomiting occurs, lean victim forward to prevent breathing in vomitus. Give a cup of water to dilute. Do not give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention.
Additional Information	Not Available.

Section 05 - Fire Fighting Measures

Suitable Extinguishing Media	Use any means suitable for extinguishing surrounding fire. Water spray may be used to keep fire exposed containers cool. If water is used, use in abundance to control heat and acid build-up.
Unsuitable Extinguishing Media	Not Available
Specific Hazards Arising From the Chemical	None known.
Special Protective Equipment and Precautions for Fire-Fighters	Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.

Environmental Precautions Prevent material from entering sewers, waterways or confined spaces.

Methods and Materials for Containment and Cleaning Up Neutralize with alkaline material (soda ash, lime), then absorb with an inert material (ie. Vermiculite, dry sand, earth) and place in a chemical waste container.

Section 07 - Handling and Storage

Precautions for Safe Handling Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

Conditions for Safe Storage Store in a cool, dry location outdoors or in well-ventilated areas of noncombustible materials. Keep containers tightly closed and away from incompatible materials. Store away from sunlight and sources of heat.

Incompatibilities Strong alkaline materials.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

Component	Regulation	Type of Listing	Value
Phosphoric acid	ACGIH	TLV-TWA	1mg/m ³
		TLV-STEL	3mg/m ³
Hydrochloric acid	ACGIH	TLV-C	2ppm
	OSHA	PEL-T-C	5ppm

Engineering Control(s)

Ventilation Requirements Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

Other Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face Chemical goggles, full-face shield, or a full-face respirator should be worn at all times when product is handled. Contact lenses should not be worn as they may contribute to severe eye injury.

Hand Protection Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Skin and Body Protection Body suits, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Impervious boots of chemically resistant material should be worn.

Respiratory Protection Wear a filter mask to protect against exposure to fumes or mists.

Thermal Hazards Not Available.

Section 09 - Physical and Chemical Properties

Appearance

Physical State	Liquid
Colour	Clear, light brown
Odour	Slightly pungent odour of hydrogen chloride
Odour Threshold	Not Available

Property

pH	<2
Melting Point/Freezing Point	<0°C
Initial Boiling Point and Boiling Range	Not Available
Flash Point	Does not burn, but is a weak oxidizing material and can slightly increase the burning rate of a fire.
Evaporation Rate	Not Available
Flammability	Does not burn. Mild oxidizing agent.
Upper Flammable Limit	Not Applicable
Lower Flammable Limit	Not Applicable
Vapour Pressure (mm Hg, 20°C)	Not Available
Vapour Density (Air=1)	Not Available
Relative Density	Not Applicable
Solubility(ies)	Completely soluble
Partition Coefficient: n-octanol/water	Not Available
Auto-ignition Temperature	Not Applicable
Decomposition Temperature	Not Available
Viscosity	Not Available
Explosive Properties	Contact with oxidizable materials may cause extremely violent combustion. Drying of concentrated FilterClean A on clothing and/or other combustible materials may cause fire or explosion. Sealed containers may rupture when heated.
Specific Gravity (Water=1)	1.1-1.18 @ 20°C
% Volatiles by Volume	Not Available
Formula	Not Available
Molecular Weight	Not Available

Section 10 - Stability and Reactivity

Reactivity	Not Available
Stability	Product is stable.
Possibility of Hazardous Reactions	Polymerization will not occur.
Conditions to Avoid	Not Available
Incompatible Materials	Strong alkaline materials.
Hazardous Decomposition Products	May release toxic and/or flammable gases such as hydrogen gas, phosphine gas, oxides of carbon, oxides of Sulphur, and hydrogen chloride. Considerable amounts of heat may be evolved.

Section 11 - Toxicological Information

Acute Toxicity Estimate

Component	Oral LD₅₀	Dermal LD₅₀	Inhalation LC₅₀
Filter Clean F	3,000 mg/kg	1,106 mg/kg	758 mg/m ³

This product has been classified in accordance with the Hazardous Products Regulations using ATE formula documented in the GHS standard.

Chronic Toxicity – Carcinogenicity

Component	IARC
FilterClean F	None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

Skin Corrosion/Irritation	High concentrations can cause severe irritation and tissue destruction. Symptoms include: burning and prickling sensations, reddening and blisters. Direct contact with liquid causes severe locale irritation, blistering and burns.
Ingestion	Corrosive. May cause sore throat, abdominal pain, nausea, and severe burns of the mouth, throat, and stomach. Severe exposures can lead to shock, circulatory collapse, and death.
Inhalation	Symptoms may include irritation of the nose and throat, labored breathing, as well as lung edema, damage to the mucous membranes and upper respiratory tract.
Serious Eye Damage/Irritation	Symptoms may include blurred vision, redness, pain, and burns to eye tissue. Concentrated solutions can cause blindness.
Respiratory or Skin Sensitization	Not Available
Germ Cell Mutagenicity	Not Available
Reproductive Toxicity	The component Hydroxyacetic acid has the potential to cause developmental toxicity in the presence of maternal toxicity.
STOT-Single Exposure	Not Available
STOT-Repeated Exposure	Not Available
Aspiration Hazard	Not Available
Synergistic Materials	Not Available

Section 12 – Ecological Information

Ecotoxicity

Component	Toxicity to Algae	Toxicity to Fish	Toxicity to Daphnia and Other Aquatic Invertebrates
Sodium bisulfate	Not Available	Not Available	LC ₅₀ (Daphnia magna, 100hr): 105.5mg/L
Citric acid	Not Available	LC ₅₀ (Leuciscus idus melanotus, 48hr): 440mg/L	EC ₅₀ (Daphnia magna, 24hr): 1535mg/L
Hydroxyacetic acid	EC ₅₀ (Green algae, 72hr): 21.6mg/L	LC ₅₀ (Lepomis sp., 48hr): 93mg/L	LC ₅₀ (Daphnia magna, 48hr): 141mg/L
Phosphoric acid	EC ₅₀ (Pseudokirchneriella subcapitata, 72hr): 32.0mg/L	LC ₅₀ (Oryzias latipes, 96hr): 75.1mg/L	EC ₅₀ (Daphnia magna, 48hr): >376mg/L
Hydrochloric acid	EC ₅₀ (Green algae, 72hr): 0.0492 mg/L	LC ₅₀ (Cyprinus carpio, 96 hr): 4.92 mg/L	LC ₅₀ (Shrimp, 48hr): 100-300 ppm

Biodegradability Not Available

Bioaccumulation Not Available

Mobility Not Available

Other Adverse Effects Not Available

Section 13 – Disposal Considerations

Waste From Residues/Unused Products Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Contaminated Packaging Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

UN Number	UN3265								
UN Proper Shipping Name	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Hydroxyacetic acid)								
Transport Hazard Class(es)	8								
Packaging Group	III								
Environmental Hazards	Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.								
Special Precautions	Not Available								
Transport in Bulk	Not Available								
Additional Information	<table><thead><tr><th><u>Packing Group</u></th><th><u>Limited Quantity Index</u></th></tr></thead><tbody><tr><td>I</td><td>0</td></tr><tr><td>II</td><td>1 L</td></tr><tr><td>III</td><td>5 L</td></tr></tbody></table>	<u>Packing Group</u>	<u>Limited Quantity Index</u>	I	0	II	1 L	III	5 L
<u>Packing Group</u>	<u>Limited Quantity Index</u>								
I	0								
II	1 L								
III	5 L								

TDG

Other Secure containers (full and/or empty) with suitable hold down devices during shipment and ensure all caps, valves, or closures are secured in the closed position.

TDG PRODUCT CLASSIFICATION: This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

NOTE: THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.

NSF Certification..... Product is certified under NSF for a tank and filter cleaner and as a media cleaner.

Section 16 – Other Information

Preparation Date September 23, 2015

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CACD) Responsible Distribution[®] initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:

- 1) CHEMINFO
- 2) eChemPortal
- 3) TOXNET
- 4) Transportation of Dangerous Goods Canada
- 5) HSDB
- 6) ECHA
- 7) PAN

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