



020

SAFETY DATA SHEET

Kleenco, Incorporated
Review Date 15-December, 2016
Version 2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Name

LIGHTNING KLEER

Product Code

020-0335

Recommended use of the chemical and restrictions on use

Follow label instructions for proper use.

Details of the supplier of the safety data sheet

Kleenco Products, Incorporated

PO Box 1786

Bellevue, WA 98009

425-883-2976

msds@kleenco.com

Emergency telephone number

Infotrac

1-800-535-5053

2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.122).

OSHA Hazards: Corrosive
Target Organs: Skin and eyes
Signal Words: Danger

Pictograms:



GHS Classification:

Acute Toxicity – Oral	Category 5
Acute Toxicity – Inhalation (Gases)	Category 4
Skin Corrosion/Irritation	Category 1b
Serious Eye Damage/Eye Irritation	Category 1
Corrosive to Metals	Category 1

GHS Label Elements, including precautionary statements:

Hazard Statements:

May be harmful if swallowed.
Causes severe skin burns and eye damage.
May be corrosive to metals.

Precautionary Statements:

Keep out of reach of children.
Use only outdoors or in a well ventilated area.
Do not breathe mist, vapors or spray.
Wash hands and any exposed skin thoroughly after handling.
Wear protective gloves. Wear eye/face protection. Wear protective clothing.
Keep in original or other corrosion resistant container.

Response: IMMEDIATELY CALL A POISON CONTROL CENTER OR PHYSICIAN.

Eyes:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Skin:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
Inhalation:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion:	IF SWALLOWED: Rinse mouth. Do not induce vomiting.
Specific Treatment:	See Safety Data Section 4: "FIRST AID MEASURES" for additional information.
Spill:	Absorb spillage to prevent material damage.
Storage:	Store locked up. Store in a corrosion resistant container.
Disposal:	Dispose of contents and container in accordance with local, state and federal regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Hazardous Components (Chemical Name)	Concentration
7732-18-5	Water	60-100%
7647-01-0	Hydrochloric acid	10-30%
1341-49-7	Ammonium bifluoride	1-5%

All chemicals above cut off point are listed. Specific chemical identity and/or exact percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Eye Contact:	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Skin Contact:	Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical attention.
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or physician if you feel unwell.
Ingestion:	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, rinse out mouth with water. IMMEDIATELY CALL A POISON CONTROL CENTER OR PHYSICIAN. Note to Physician: Probable mucosal damage may contraindicate the use of use of gastric lavage.

5. FIREFIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:	Product does not support combustion, Use extinguishing agent suitable for type of surrounding fire.
Specific hazards arising from the chemical:	Dried product is capable of burning. Combustion products are toxic. Contact with metals may evolve flammable hydrogen gas.
Hazardous Combustion Products:	May include Carbon monoxide, Carbon dioxide and other toxic gases or vapors.
Protective Equipment and Precautions for Firefighters:	Wear MSHA/NIOSH approved self-contained breathing apparatus (SCBA) and full protective gear. Cool fire exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.
Environmental precautions:	Do not rinse spill onto the ground, into storm sewers or bodies of water.
Methods and materials for containment and cleaning up:	Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

7. HANDLING AND STORAGE

Safe Handling:	Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling.
Storage Conditions:	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of reach of children. Keep from freezing.
Incompatible Materials:	Sodium hypochlorite (or other hypochlorites). Strong bases. Reactive metals such as aluminum, zinc and tin.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits			
Chemical Name	ACGIH TLV	OSHA PEL	NIOSH
Hydrochloric acid Cas# 7647-01-0	Ceiling 2ppm	(vacated) Ceiling: 5ppm (Vacated) Ceiling: 7 mg/m3 Ceiling 5 ppm Ceiling 7 mg/m3	IDLH 50 ppm Ceiling 5 ppm Ceiling 7 mg/m3

Engineering Controls:	Provide good general ventilation. If work practices generate dust, fumes, gas, vapors or mists which expose workers to chemicals above the occupational exposure limits, local exhaust ventilation or other engineering controls should be considered. Eye wash stations and shower facilities should be readily accessible in areas where the product is handled.
PERSONAL PROTECTIVE EQUIPMENT	
Eye/Face Protection:	Wear splash goggles.

Skin and Body Protection:	Wear rubber or other chemical-resistant gloves. Use of impervious apron, boots and other protective equipment should be considered in order to prevent or minimize contact with the product.
Respiratory Protection:	Not required with expected use. If occupational exposure limits are exceeded or respiratory irritation occurs, use of a NIOSH/MSHA approved respirator suitable for the use-conditions and chemicals in Section 3 should be considered.
General Hygiene Considerations:	Wash hands and any exposed skin thoroughly after handling. See 29CFR 1910.132-138 for further guidance

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Odor	Mint fragrance
Odor threshold	No data
Color	Light Green
pH	<2.0
Melting point/freezing point	No data
Initial boiling point and boiling range	~212 F.
Flash point	Not flammable
Evaporation rate	<1 (Butyl acetate =1)
Flammability	Not flammable
Upper/lower flammability or explosive limit	Not explosive
Vapor pressure	No data
Vapor density	No data
Relative density	1.08
Solubility	Soluble in water
Partition coefficient n-octanol/water	No data
Auto-ignition temperature	No data
Decomposition temperature	No data

10. STABILITY AND REACTIVITY

Reactivity:	This material is considered to be non-reactive under normal conditions of use.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Not expected to occur with normal handling and storage.
Conditions to avoid:	Extremes of temperature and direct sunlight.
Incompatible materials:	Sodium hypochlorite (or other hypochlorites). Strong bases. Reactive metals such as aluminum, zinc and tin.
Hazardous decomposition products:	May include carbon monoxide, carbon dioxide (CO ₂) and other toxic gases or vapors.

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure:	Eyes, Skin, Ingestion, Inhalation
Symptoms of Exposure	
Eye Contact:	Pain, redness, swelling of the conjunctiva and tissue damage. Eye contact may cause permanent damage.
Skin Contact:	Pain, redness, blistering and possible chemical burn.
Inhalation:	Irritation or damage to the mucous membranes of the respiratory tract. Nasal discomfort and coughing.
Ingestion:	Damage or chemical burns to mouth, throat and stomach. Pain, nausea, vomiting and diarrhea.
Immediate, Delayed, Chronic Effects	
Product Information:	Data not available or insufficient for classification.
Target Organ Effects:	Eyes. Respiratory system. Skin.
Carcinogenicity:	No components of this product present at levels greater than or equal to 0.1% are listed as probable, possible or confirmed human carcinogen by ACGIH, IARC, NTP, or OSHA.

Chronic Toxicity	Not available.
Teratogenicity	Not available
Mutagenicity	Not available
Embryotoxicity	Not available
Specific Target Organ Toxicity	Not available

Hazardous Component >1% Acute Toxicity Information			
Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hydrochloric acid 7647-01-0	700 mg/kg, rat	1449 mg/kg (mouse)	1.0375 mg/l, 4 h, dust/mist (rat, male)
Ammonium Bifluoride 1341-49-7	60-130 mg/kg, rat	No data	No data

12. ECOLOGICAL INFORMATION

Hazardous Component >1% Acute Ecotoxicity Information				
Chemical Name	Algae/Aquatic Plants	Fish	Toxicity to Microorganisms	Crustacea
Hydrochloric acid 7647-01-0	No data	LC 50 static 282 mg/L, 96 h, <i>Gambusia affinis</i>	No data	No data
Ammonium Bifluoride 1341-49-7	No data	51 mg/L (fluorides) (<i>Salmo gairdneri</i>)	No data	No data

Persistence and Degradability	Not Available
Bioaccumulative Potential	Not Available
Mobility in Soil	Not available
PBT and vPvB Assessment	Not Available
Other Adverse Effects	Not Available

13. DISPOSAL CONSIDERATIONS

Waste Residues:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of hazardous materials or containers.
Product Containers:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of hazardous materials product container.

14. TRANSPORT INFORMATION

US DOT:	NA1760, Compound Cleaning Liquid (Containing hydrochloric acid solution), Class 8, PGIII, Corrosive
Special Provisions:	Shipping descriptions may vary based on mode of transport, quantities, package size and/or origin and destination. Limited quantity – Consumer Commodity, ORM-D, DOT-E-173.154. Check with a trained hazardous materials transportation expert for information specific to your situation.

15. REGULATORY INFORMATION

TSCA INVENTORY STATUS	All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.
California Proposition 65	Not listed
SARA 302	Not listed
SARA 313	Hydrochloric acid 7647-01-0
WHMIS Canada	Class E: Corrosive liquid Class D-1B: Material causing other toxic effects (very toxic)

SARA 311/312 Hazard	Yes/No
Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

16. OTHER INFORMATION

Revision	Date
Revision 2	12/15/2016

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