



# 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 KLEEN  
Product Code 028-0086

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](mailto: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.

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

|                      |   |
|----------------------|---|
| <b>Eye Contact:</b>  | 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.   |
| <b>Skin Contact:</b> | Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation occurs: Get medical attention.   |
| <b>Inhalation:</b>   | 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.  |
| <b>Ingestion:</b>    | <b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, rinse out mouth with water. IMMEDIATELY CALL A POISON CONTROL CENTER OR PHYSICIAN. <b>Note to Physician:</b> 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<br>Cas# 7647-01-0 | Ceiling 2ppm | (vacated) Ceiling: 5ppm<br>(Vacated) Ceiling: 7 mg/m3<br>Ceiling 5 ppm<br>Ceiling 7 mg/m3 | IDLH 50 ppm<br>Ceiling 5 ppm<br>Ceiling 7 mg/m3 |

|                                      |  |
|--------------------------------------|--|
| Engineering Controls:                | Provide good general ventilation.<br>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.<br>Eye wash stations and shower facilities should be readily accessible in areas where the product is handled. |
| <b>PERSONAL PROTECTIVE EQUIPMENT</b> |  |
| Eye/Face Protection:                 | Wear splash goggles.   |

|  |  |
|--|--|
| <b>Skin and Body Protection:</b>       | 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.   |
| <b>Respiratory Protection:</b>         | Not required with expected use.<br>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. |
| <b>General Hygiene Considerations:</b> | 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

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

## 11. TOXICOLOGICAL INFORMATION

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| <b>Likely routes of exposure:</b> | 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. |
|-----------------|--|

|                            |  |
|----------------------------|--|
| <b>Product Containers:</b> | 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

|                            |  |
|----------------------------|--|
| <b>US DOT:</b>             | NA1760, Class 8, PGIII, Compound Cleaning Liquid (Containing hydrochloric acid solution), Corrosive  |
| <b>Special Provisions:</b> | 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

|                                  |  |
|----------------------------------|--|
| <b>TSCA INVENTORY STATUS</b>     | All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory. |
| <b>California Proposition 65</b> | Not listed   |
| <b>SARA 302</b>                  | Not listed   |
| <b>SARA 313</b>                  | Hydrochloric acid 7647-01-0  |
| <b>WHMIS Canada</b>              | Class E: Corrosive liquid<br>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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