SAFETY DATA SHEET
AF79

Section 1. Identification

GHS product identifier : AF79
Other means of identification : Not available.
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Supplier's details : Betco Corporation
1001 Brown Avenue
Toledo, OH 43607
www.betco.com
888-462-3826

Emergency telephone number (with hours of operation) : Chemtrec 800-424-9300 (24 Hour)

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Please read complete product label

Classification of the substance or mixture : SKIN CORROSION/IRRITATION - Category 1
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements

Hazard pictograms

Signal word : Danger (Per OSHA). CAUTION (Per EPA).

Hazard statements : Causes severe skin burns and eye damage (Per OSHA). Causes eye and skin irritation (Per EPA).

Precautionary statements


Response : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage : Store locked up.
Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Date of issue/Date of revision : 3/30/2015. Date of previous issue : No previous validation. Version : 1
Section 2. Hazards identification

Hazards not otherwise classified: None known.

Section 3. Composition/information on ingredients

Substance/mixture: Mixture
Other means of identification: Not available.

CAS number/other identifiers

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrasodium ethylene diamine tetraacetate</td>
<td>≥1 - &lt;3</td>
<td>64-02-8</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact**: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation**: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact**: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact**: Causes serious eye damage (Per OSHA). Causes eye irritation (Per EPA).

**Inhalation**: No known significant effects or critical hazards.
Section 4. First aid measures

Skin contact: Causes severe burns (Per OHSA). Causes skin irritation (Per EPA).
Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms:
Eye contact: Adverse symptoms may include the following:
- pain
- watering
- redness

Inhalation: No specific data.
Skin contact: Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur

Ingestion: Adverse symptoms may include the following:
- stomach pains

Notes to physician:
In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments:
No specific treatment.

Protection of first-aiders:
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media:
Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical:
In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products:
Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide
- nitrogen oxides
- metal oxide/oxides

Special protective actions for fire-fighters:
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters:
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.
Section 8. Exposure controls/personal protection

**Appropriate engineering controls**: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Environmental exposure controls**: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: safety glasses

**Skin protection**

**Hand protection**: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. <1 hour (breakthrough time): disposable vinyl

**Body protection**: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Personal protective equipment (Pictograms)**: 🕶️

Section 9. Physical and chemical properties

**Appearance**

- **Physical state**: Liquid.
- **Color**: Clear. Blue.
- **Odor**: Pleasant.
- **Odor threshold**: Not available.
- **pH**: 11.5 to 12.5
- **Melting point**: Not available.
- **Boiling point**: Not available.
- **Flash point**: Closed cup: >150°C (>302°F) [Product does not sustain combustion.]
- **Evaporation rate**: Not available.
Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable)</td>
<td>Not available.</td>
</tr>
<tr>
<td>limits</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.007</td>
</tr>
<tr>
<td>Solubility</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>Reactive or incompatible with the following materials: acids</td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrasodium ethylene diamine tetraacetate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>10 g/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrasodium ethylene diamine tetraacetate</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.
**Section 11. Toxicological information**

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

**Information on the likely routes of exposure**

<table>
<thead>
<tr>
<th>Routes of entry anticipated: Dermal.</th>
<th>Routes of entry not anticipated: Oral, Inhalation.</th>
</tr>
</thead>
</table>

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>Causes serious eye damage (Per OSHA). Causes eye irritation (Per EPA).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Causes severe burns (Per OHSA). Causes skin irritation (Per EPA).</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**Symptoms related to the physical, chemical and toxicological characteristics**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>Adverse symptoms may include the following: pain, watering, redness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Adverse symptoms may include the following: pain or irritation, redness, blistering may occur</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Adverse symptoms may include the following: stomach pains</td>
</tr>
</tbody>
</table>

**Delayed and immediate effects and also chronic effects from short and long term exposure**

**Short term exposure**

<table>
<thead>
<tr>
<th>Potential immediate effects</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential delayed effects</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Long term exposure**

<table>
<thead>
<tr>
<th>Potential immediate effects</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential delayed effects</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Potential chronic health effects**

Not available.

- **General**
  - No known significant effects or critical hazards.
- **Carcinogenicity**
  - No known significant effects or critical hazards.
- **Mutagenicity**
  - No known significant effects or critical hazards.
- **Teratogenicity**
  - No known significant effects or critical hazards.
- **Developmental effects**
  - No known significant effects or critical hazards.
- **Fertility effects**
  - No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

**Date of issue/Date of revision** : 3/30/2015.  **Date of previous issue** : No previous validation.  **Version** : 1
Section 11. Toxicological information

Not available.

Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrasodium ethylene diamine tetraacetate</td>
<td>Acute LC50 486000 µg/l Fresh water</td>
<td>Fish - Lepomis macrochirus</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrasodium ethylene diamine tetraacetate</td>
<td>5.01</td>
<td>1.8</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>UN number</th>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>ADR/RID Classification</th>
<th>IMDG Classification</th>
<th>IATA Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision : 3/30/2015. Date of previous issue : No previous validation. Version : 1
Section 14. Transport information

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional information</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Special precautions for user: Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations:
- TSCA 4(a) proposed test rules: Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides
- TSCA 8(a) PAIR: (2-methoxymethyletheroxy)propanol
- TSCA 8(a) CDR Exempt/Partial exemption: Not determined
- TSCA 12(b) one-time export: (2-methoxymethyletheroxy)propanol
  Not determined.
- Clean Water Act (CWA) 311: sodium hydroxide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

DEA List II Chemicals (Essential Chemicals): Not listed

SARA 302/304
- Composition/information on ingredients: No products were found.

SARA 304 RQ: Not applicable.

SARA 311/312 Classification: Immediate (acute) health hazard

Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>tetrasodium ethylene diamine tetraacetate</td>
<td>≥1 - &lt;3</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

State regulations
- Massachusetts: The following components are listed: DIPROPYLENE GLYCOL METHYL ETHER
- New York: None of the components are listed.

Date of issue/Date of revision: 3/30/2015. Date of previous issue: No previous validation. Version: 1
Section 15. Regulatory information

New Jersey: The following components are listed: DIPROPYLENE GLYCOL METHYL ETHER; (2-METHOXYMETHYLETHOXY) PROPA

Pennsylvania: The following components are listed: PROPA, (2-METHOXYMETHYLETHOXY)

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)
Not listed.

UNEP Aarhus Protocol on POPs and Heavy Metals
Not listed.

International lists

National inventory

Australia: Not determined.
Canada: Not determined.
China: Not determined.
Europe: Not determined.
Japan: Not determined.
Malaysia: Not determined.
New Zealand: Not determined.
Philippines: Not determined.
Republic of Korea: Not determined.
Taiwan: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprint material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.
Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Corr. 1, H314</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Eye Dam. 1, H318</td>
<td>On basis of test data</td>
</tr>
</tbody>
</table>

History

Date of printing: 3/30/2015.
Date of issue/Date of revision: 3/30/2015.
Date of previous issue: No previous validation.
Version: 1

Key to abbreviations

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- UN = United Nations

References

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.
Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name/Trade Name</th>
<th>Purebright Ultra Germicidal Bleach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturer:</td>
<td>KIK CUSTOM PRODUCTS</td>
</tr>
<tr>
<td></td>
<td>2921 Corder Street</td>
</tr>
<tr>
<td></td>
<td>Houston, TX USA 77054</td>
</tr>
<tr>
<td>Contact Number:</td>
<td>Tel: 905-660-0444</td>
</tr>
<tr>
<td>24Hr Emergency Contact Number:</td>
<td>Tel: 1-800-255-3924</td>
</tr>
<tr>
<td>Prepared By:</td>
<td>KIK CUSTOM PRODUCTS Laboratory</td>
</tr>
<tr>
<td>Date Last Revised:</td>
<td>October 18, 2011</td>
</tr>
<tr>
<td>Replaces Date:</td>
<td>September 27, 2011</td>
</tr>
</tbody>
</table>

Section 2. Hazardous Ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Concentration</th>
<th>CAS#</th>
<th>Worker Exposure Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite</td>
<td>5.0-6.0%</td>
<td>7681-52-9</td>
<td>not established</td>
</tr>
<tr>
<td>Sodium Hydroxide</td>
<td>&gt;1.0 %</td>
<td>1310-73-2</td>
<td>2 mg/m³ – TLV-C*</td>
</tr>
</tbody>
</table>

* TLV-C = ACGIH Threshold Limit Value – Ceiling

None of the ingredients in this product are on the IARC or NTP carcinogen lists.

Section 3. Hazards Identification

Route of Entry

<table>
<thead>
<tr>
<th>Skin</th>
<th>Yes</th>
<th>Eye</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Yes</td>
<td>Ingestion</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Effects of Exposure: May cause substantial but temporary eye injury. May irritate skin. When ingested, may cause nausea and vomiting. Inhalation of vapor will irritate nose, throat and lungs.

Effects of acute exposure: Inhalation of mist or vapor may cause breathing difficulty. Its corrosiveness may cause severe irritation to eyes and skin. May cause permanent damage if not treated properly. Ingestion can cause corrosion of mucous membranes, severe esophageal burns and perforation of esophagus or stomach.

Effects of chronic exposure: Not Known.

Under normal consumer use conditions, the likelihood of any adverse health effects is low. The following medical conditions may be aggravated by exposure to high concentration of vapor or mist: heart conditions or chronic respiratory problems such as asthma, bronchitis or obstructive lung disease. Some clinical tests conducted on intact skin with sodium hypochlorite liquid bleach found no sensitization in the test subjects.

Section 4. First Aid Measures

Skin: Remove contaminated clothing. Wash with copious amount of water. If irritation persists, call a doctor.

Eyes: Flush eyes with cool running water holding eyelids apart to ensure thorough rinsing for 15 minutes. Remove contact lenses. See a doctor immediately.

Inhalation: Move to fresh air and restore breathing. If breathing problems develop, call a doctor.

Ingestion: DO NOT INDUCE VOMITING! Drink large amounts of water. Do not give anything by mouth to a convulsing or unconscious person. See a doctor immediately.

General Advice: If irritation occurs, see a doctor immediately.
Section 5. Preventative Measures

Protective Equipment

Gloves: Impervious PVC or Neoprene.
Eyes: Safety glasses at the very least. Chemical splash goggles. Face shield also helpful.
Respiratory: Not normally required. Footwear: Protect shoes and feet when using product for floor cleaning.

LEAK AND SPILL PROTECTION:
Small spills: Dilute product by flooding area with large quantity of water and flush to sanitary sewer.
Large spills: Contain run-off by diking with suitable material. Soak up liquid on inert absorbent and transfer to approved container. Prevent spill from entering sewers or waterways

WASTE DISPOSAL: Reclaim or dispose in accordance with local regulations.

STORAGE REQUIREMENTS: Store in a cool, dry and well-ventilated area.

Section 6. Physical Data

<table>
<thead>
<tr>
<th>State</th>
<th>Liquid</th>
<th>pH</th>
<th>12.6 maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear Pale yellow</td>
<td>Specific Gravity</td>
<td>1.080 minimum</td>
</tr>
<tr>
<td>Odor</td>
<td>Typical Bleach</td>
<td>Solubility in water</td>
<td>complete</td>
</tr>
</tbody>
</table>

Section 7. Fire & Explosion

Not flammable nor explosive

Section 8. Reactivity Data

Chemical Stability: Stable under normal use and storage conditions.
Incompatible Conditions: YES X NO
Incompatible Substances: Acids, ammonia, urea, metals & oxidizers.

Section 9. Regulatory Information

WHIMS:
Health: 2
Flammability: 0
Reactivity: 1

DOT: Not Restricted

As the handling and use of products under user's conditions are beyond our control, no warranty, expressed or implied, is made concerning this product. The information contained herein is offered only as a guide to the handling of this specific material and is not intended to be all-inclusive in the manner and conditions of use and handling. The user assumes all risks of use or handling, whether or not in accordance with any directions or suggestions of the manufacturer. Manufacturer shall not be liable to purchaser or any other person for loss or damages directly or indirectly arising from the use of our product.
1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SNAPBACK SPRAY BUFF (LIQUID)

MSDS #: 0029114110014
Product Code: 04116
Recommended use: Floor care.

Manufacturer, importer, supplier:
US Headquarters
JohnsonDiversey, Inc.
8310 16th St.
Sturtevant, Wisconsin 53177-1964
Phone: 1-888-352-2249
MSDS Internet Address:
www.johnsondiversey.com
Emergency telephone number: 1-800-851-7145 (U.S.); 1-651-917-6133 (Int’l)

2. HAZARDS IDENTIFICATION

Principle routes of exposure:
Eye contact. Skin contact. Inhalation.

Eye contact:
May be mildly irritating to eyes.

Skin contact:
May be mildly irritating to skin.

Inhalation:
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Weight %</th>
<th>LD50 Oral - Rat (mg/kg)</th>
<th>LD50 Dermal - Rabbit</th>
<th>LC50 Inhalation - Rat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isoparaffinic hydrocarbon solvent</td>
<td>64742-48-9</td>
<td>5 - 10%</td>
<td>5000</td>
<td>&gt;3160 mg/kg</td>
<td>Not available</td>
</tr>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>1 - 5%</td>
<td>5500</td>
<td>=4200 µL/kg</td>
<td>5.24 g/m³</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye contact: Flush immediately with plenty of water. Get medical attention if irritation occurs.
Skin contact: May be mildly irritating to eyes.
Inhalation: None known.
Ingestion: None known.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: The product is not flammable. Extinguish fire using agent suitable for surrounding fire.
Specific hazards: Not applicable
Unusual hazards: None known.
Specific methods: No special methods required
Special protective equipment for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
Extinguishing media which must not be used for safety reasons: No information available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment
Environmental precautions and clean-up methods: Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Use a water rinse for final clean-up.
7. HANDLING AND STORAGE

Handling:
Avoid contact with skin and eyes. FOR COMMERCIAL AND INDUSTRIAL USE ONLY. FOR COMMERCIAL AND INDUSTRIAL USE ONLY.

Storage:
Protect from freezing. Keep tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures to reduce exposure:
No special ventilation requirements. General room ventilation is adequate.

Personal Protective Equipment

Eye protection: No special requirements under normal use conditions
Hand protection: No special requirements under normal use conditions
Skin and body protection: No special requirements under normal use conditions
Respiratory protection: No special requirements under normal use conditions
Hygiene measures: Handle in accordance with good industrial hygiene and safety practice

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid
pH: 8.4
Appearance: Liquid
Color: White
Odor: Characteristic
Specific gravity: 0.9816
Density: 8.19 lbs/gal Kg/L
VOC: 8.5% *
Flash point: 153°F 67.2°C
Solubility: Completely Soluble
Viscosity: No information available

Bulk density: 8.18 lb/gal
Vapor density: No information available
Evaporation Rate: No information available
Boiling point/range: Not determined
Melting point/range: Not determined
Partition coefficient (n-octanol/water): No information available
Solubility in other solvents: No information available
Elemental Phosphorus: 0% by wt.

10. STABILITY AND REACTIVITY

Stability: The product is stable
Polymerization: Hazardous polymerization does not occur
Hazardous decomposition products: None reasonably foreseeable.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Oral LD50 estimated to be greater than 5000 mg/kg
Component Information: See Section 3
Chronic toxicity: None known
Specific effects
Carcinogenic effects: None known
Mutagenic effects: None known
Reproductive toxicity: None known
Target organ effects: None known

12. ECOLOGICAL INFORMATION

Environmental Information: No data available

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Dispose of according to all federal, state and local applicable regulations

14. TRANSPORT INFORMATION

DOT/TDG: Please refer to the Bill of Lading/receiving documents for up to date shipping information
15. REGULATORY INFORMATION

International Inventories
All components of this product are listed on the following inventories: U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Philippines (PICCS).

U.S. Regulations
California Proposition 65: This product is not subject to the reporting requirements under California’s Proposition 65

STATE RIGHT TO KNOW

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>MARTK:</th>
<th>NJRTK:</th>
<th>PARTK:</th>
<th>RIRTK:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorbitan monooleate</td>
<td>1338-43-8</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Alcohol ethoxylates</td>
<td>68131-39-5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Isoparaffinic hydrocarbon solvent</td>
<td>64742-48-9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>-</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

CERCLA/ SARA

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>Weight %</th>
<th>CERCLA/SARA RQ (lbs)</th>
<th>Section 302 TPQ (lbs)</th>
<th>Section 313</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diethylene glycol monoethyl ether</td>
<td>111-90-0</td>
<td>1 - 5%</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Ingredient(s)       | CAA HAP | CAA ODS | CWA Priority Pollutants |
---------------------|---------|---------|-------------------------|
Diethylene glycol monoethyl ether | X       |         |                         |

SARA 311/312 Hazard Categories

Immediate: -
Delayed: -
Fire: -
Reactivity: -
Sudden Release of Pressure: -

Canada
WHMIS hazard class: Non-controlled.

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>CAS #</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isoparaffinic hydrocarbon solvent</td>
<td>64742-48-9</td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

Reason for revision: Not applicable
Prepared by: NAPRAC
Additional advice: None

Notice to Reader: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to the accuracy of the information contained within. Actual conditions of use and handling are beyond seller’s control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.
Safety Data Sheet

1. IDENTIFICATION

Product Identifier
Product Name: Carpet Stain / Spot Remover

Other means of identification

Product Code: GEN101

Recommended use of the chemical and restrictions on use
Recommended Use: Carpet and upholstery stain remover.

Details of the supplier of the safety data sheet
Supplier Address: Cole Papers, Inc.
1300 38th St. N.W.
Fargo, ND 58102

Emergency Telephone Number
Company Phone Number: 1-800-800-8090
Emergency Telephone (24 hr) : Chemtel
1-800-255-3924

2. HAZARDS IDENTIFICATION

Appearance: Colorless liquid
Physical State: Liquid
Odor: Jasmine

Classification
This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

Other Hazards
Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>Proprietary</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Proprietary</td>
<td>&lt;5</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Proprietary</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**
4. FIRST-AID MEASURES

First Aid Measures

**Eye Contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get immediate medical advice/attention.

**Skin Contact**
Remove contaminated clothing. Wash with soap and water. If irritation persists, seek medical attention.

**Inhalation**
Remove to fresh air. Get medical attention if symptoms persist.

**Ingestion**
Give large amounts of water. DO NOT induce vomiting. Get medical attention.

Most important symptoms and effects

**Symptoms**
Prolonged or repeated skin contact may cause irritation. Eye contact may be slightly irritating. May cause irritation to the mucous membranes and upper respiratory tract.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**
Not determined.

**Specific Hazards Arising from the Chemical**
Product is not flammable.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions**
Use personal protective equipment as required.

**Environmental Precautions**
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**Methods and material for containment and cleaning up**

**Methods for Containment**
Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up**
Flood area with water and then mop up. Dispose of in accordance with federal, state and local regulations.
7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Do not destroy or deface the label.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Store containers upright.

Incompatible Materials
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Avoid contact with eyes.

Skin and Body Protection
Wear suitable protective clothing.

Respiratory Protection
Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
<th>Odor</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless liquid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Colorless</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Jasmine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>10.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not Applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>None (will not burn)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>Liquid-Not Applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not Applicable</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.18</td>
<td></td>
<td>(1=Water)</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Auto-ignition Temperature** Not determined  
**Decomposition Temperature** Not determined  
**Kinematic Viscosity** Not determined  
**Dynamic Viscosity** Not determined  
**Explosive Properties** Not determined  
**Oxidizing Properties** Not determined  

### 10. STABILITY AND REACTIVITY

**Reactivity**  
Not reactive under normal conditions.

**Chemical Stability**  
Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**  
None under normal processing.

**Conditions to Avoid**  
Keep out of reach of children.

**Incompatible Materials**  
None known based on information supplied.

**Hazardous Decomposition Products**  
None known based on information supplied.

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

**Product Information**

**Eye Contact**  
Irritating to eyes.

**Skin Contact**  
Prolonged contact may cause redness and irritation.

**Inhalation**  
May cause irritation of respiratory tract.

**Ingestion**  
Do not taste or swallow.

**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>= 3184 mg/kg (Rat)</td>
<td>= 15440 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 7200 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>&gt; 10 g/kg (Rat)</td>
<td>&gt; 2 g/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 20000 mg/kg (Rat)</td>
<td>= 20800 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 4090 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Information on physical, chemical and toxicological effects**

**Symptoms**  
Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**
Carcinogenicity
This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity
Harmful to aquatic life.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td></td>
<td>11619: 96 h Pimephales promelas mg/L LC50 static</td>
<td>10: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
<tr>
<td>Trade Secret</td>
<td></td>
<td>19000: 96 h Pseudokirchneriella subcapitata mg/L EC50</td>
<td>10000: 24 h Daphnia magna mg/L EC50 1000: 48 h Daphnia magna mg/L EC50 Static</td>
<td></td>
</tr>
<tr>
<td>Trade Secret</td>
<td></td>
<td>242: 120 h Nitzschia mg/L EC50</td>
<td>265: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
</tbody>
</table>

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT
Not regulated

IATA
Not regulated
IMDG
Marine Pollutant
This material may meet the definition of a marine pollutant

15. REGULATORY INFORMATION

International Inventories

TSCA
One or more ingredient(s) in this product is listed on the TSCA inventory

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

US Federal Regulations

SARA 313

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret -</td>
<td></td>
<td>&lt;5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Secret</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA
Health Hazards: Not determined
Flammability: Not determined
Instability: Not determined
Special Hazards: Not determined

HMIS
Health Hazards: 1
Flammability: 0
Physical Hazards: 0
Personal Protection: A = Goggles

Issue Date: 20-Jun-2000
Revision Date: 08-Sep-2014
Revision Note: New format

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
1. IDENTIFICATION

Product Identifier
Product Name Neutral AP Cleaner

Other means of identification
Product Code GEN 107, GEN 108

Recommended use of the chemical and restrictions on use
Recommended Use Neutral no-rinse cleaner.

Details of the supplier of the safety data sheet
Supplier Address Cole Papers, Inc.
1300 38th St. N.W.
Fargo, ND 58102

Emergency Telephone Number
Company Phone Number 1-800-800-8090
Emergency Telephone (24 hr) Chemtel )
1-800-255-3924

2. HAZARDS IDENTIFICATION

Appearance Pink liquid Physical State Liquid Odor Lemon

Classification
This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which, at their given concentration, are considered to be hazardous to health.
4. FIRST-AID MEASURES

First Aid Measures

Eye Contact  Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Skin Contact  Take off contaminated clothing. Wash with plenty of water. If irritation persists, seek medical attention.

Inhalation  None under normal use conditions.

Ingestion  Give large quantities of water. Do not induce vomiting. Get medical attention.

Most important symptoms and effects

Symptoms  Prolonged or repeated skin contact may cause irritation. Eye contact may be slightly irritating.

Indication of any immediate medical attention and special treatment needed

Notes to Physician  Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media  Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media  Not determined.

Specific Hazards Arising from the Chemical  None known.

Protective equipment and precautions for firefighters  As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions  Use personal protective equipment as required.

Methods and material for containment and cleaning up

Methods for Containment  Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up
Flood area with water and then mop up. Dispose of in accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Do not destroy or deface the label.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Store containers upright.

Incompatible Materials
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines
No exposure limits noted for ingredient(s)

Appropriate engineering controls

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Goggles.

Skin and Body Protection
No protective equipment is needed under normal use conditions.

Respiratory Protection
Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Pink liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Pink</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Lemon</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.0</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>None (will not burn)</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>n/a-liquid</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
None known.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact
Avoid contact with eyes.

Skin Contact
Avoid contact with skin.

Inhalation
Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Ingestion
Do not taste or swallow.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>= 3053 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 7200 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 1378 mg/kg (Rat)</td>
<td>&gt; 2 g/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms
Please see section 4 of this SDS for symptoms.
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity
Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT
Not regulated

IATA
Not regulated

IMDG
Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA
Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

US State Regulations

U.S. State Right-to-Know Regulations
Not determined

### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td>A = Goggles</td>
</tr>
</tbody>
</table>

Issue Date: 14-Jun-2005
Revision Date: 06-May-2014
Revision Note: New format

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
1. IDENTIFICATION

Product Identifier
Product Name Lemon Disinfectant Cleaner

Other means of identification
Product Code GEN116

Recommended use of the chemical and restrictions on use
Recommended Use Quat disinfectant.

Details of the supplier of the safety data sheet
Supplier Address Cole Papers, Inc.
1300 38th St. N.W.
Fargo, ND 58102

Emergency Telephone Number
Company Phone Number 1-800-800-8090
Emergency Telephone (24 hr) Chemtel
1-800-255-3924

2. HAZARDS IDENTIFICATION

Appearance Yellow liquid Physical State Liquid Odor Lemon

Classification
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 1

Signal Word Danger

Hazard Statements
Causes skin irritation
Causes serious eye damage

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection
Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a poison center or doctor/physician
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash it before reuse

Unknown Acute Toxicity
0.14% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>67-63-0</td>
<td>4.40</td>
</tr>
<tr>
<td>Alkyl dimethyl benzyl ammonium chloride (C12-16)</td>
<td>68424-85-1</td>
<td>3.30</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact
Take off contaminated clothing. Wash skin with soap and water. If irritation persists, seek medical attention. Wash contaminated clothing before reuse.

Inhalation
None under normal use conditions.

Ingestion
Give large quantities of water. Do not induce vomiting. Get medical attention.

Most important symptoms and effects

Symptoms
May cause skin irritation. Corrosive to eyes.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
None known.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

**Personal Precautions**
Use personal protective equipment as required.

Methods and material for containment and cleaning up

**Methods for Containment**
Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up**
Flood area with water and then mop up. Dispose of in accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

**Advice on Safe Handling**
Handle in accordance with good industrial hygiene and safety practice. Do not destroy or deface the label. Wash thoroughly after handling. Use personal protection recommended in Section 8.

Conditions for safe storage, including any incompatibilities

**Storage Conditions**
Keep containers tightly closed in a dry, cool and well-ventilated place. Store containers upright.

**Incompatible Materials**
None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>STEL: 400 ppm  TWA: 200 ppm</td>
<td>TWA: 400 ppm  TWA: 980 mg/m³  (vacated) TWA: 400 ppm  TWA: 980 mg/m³  (vacated) STEL: 500 ppm  (vacated) STEL: 1225 mg/m³</td>
<td>IDLH: 2000 ppm  TWA: 400 ppm  TWA: 980 mg/m³  STEL: 500 ppm  STEL: 1225 mg/m³</td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

**Engineering Controls**
Apply technical measures to comply with the occupational exposure limits.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection**
Goggles.

**Skin and Body Protection**
Rubber gloves. Suitable protective clothing.

**Respiratory Protection**
Ensure adequate ventilation, especially in confined areas.
General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks  • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Yellow liquid</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Lemon</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.0</td>
<td></td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Boiling Point/Boiling Range</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>None (will not burn)</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Flammability (Solid, Gas)</td>
<td>n/a-liquid</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limits</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.00</td>
<td>(1=Water)</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Completely soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not determined</td>
<td></td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not determined</td>
<td></td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to Avoid
None known.

Incompatible Materials
None known based on information supplied.

Hazardous Decomposition Products
None known based on information supplied.
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye damage.

Skin Contact Causes skin irritation.

Inhalation Under normal conditions of intended use, this material is not expected to be an inhalation hazard.

Ingestion Do not taste or swallow.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>= 4396 mg/kg (Rat)</td>
<td>= 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)</td>
<td>= 72.6 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Alkyl dimethyl benzyl ammonium chloride (C12-16) 68424-85-1</td>
<td>= 426 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Not classifiable as a human carcinogen.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>Group 3</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Legend

IARC (International Agency for Research on Cancer)
Group 3 IARC components are "not classifiable as human carcinogens"
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 0.14% of the mixture consists of ingredient(s) of unknown toxicity.
12. ECOLOGICAL INFORMATION

Ecotoxicity
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50</td>
<td>13299: 48 h Daphnia magna mg/L EC50</td>
<td></td>
</tr>
</tbody>
</table>

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Other Adverse Effects
Not determined.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol 67-63-0</td>
<td>Toxic Ignitable</td>
</tr>
</tbody>
</table>
14. TRANSPORT INFORMATION

DOT  Not regulated
IATA Not regulated
IMDG  Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA  Listed

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCs - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol - 67-63-0</td>
<td>67-63-0</td>
<td>4.40</td>
<td>1.0</td>
</tr>
</tbody>
</table>

US State Regulations

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropyl alcohol</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>67-63-0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td></td>
<td>0</td>
<td></td>
<td>B = Goggles, gloves</td>
</tr>
</tbody>
</table>

**Issue Date:** 31-May-2012  
**Revision Date:** 07-May-2014  
**Revision Note:** New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
1. IDENTIFICATION

Product Identifier
Product Name Cherry Porcelain & Bowl Cleaner

Other means of identification
Product Code GEN131

Recommended use of the chemical and restrictions on use
Recommended Use Acid Toilet Bowl Cleaner.

Details of the supplier of the safety data sheet
Supplier Address Cole Papers, Inc. 1300 38th St. N.W. Fargo ND 58102
Emergency Telephone Number Company Phone Number 1-800-800-8090
Emergency Telephone (24 hr) Chemtel 1-800-255-3924

2. HAZARDS IDENTIFICATION

Appearance Clear red liquid Physical State Liquid Odor Cherry

Classification

| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation                | Category 1  Sub-category B |
| Serious eye damage/eye irritation        | Category 1 |

Signal Word
Danger

Hazard Statements
Harmful if inhaled
Causes severe skin burns and eye damage
Precautionary Statements - Prevention
Use only outdoors or in a well-ventilated area
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a poison center or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation persists: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a poison center or doctor/physician
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
Rinse mouth
Do not induce vomiting

Precautionary Statements - Storage
Store locked up

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>7647-01-0</td>
<td>10-15</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Proprietary</td>
<td>&lt;1</td>
</tr>
</tbody>
</table>

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.**

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.

Skin Contact
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If irritation persists, seek medical attention.

Inhalation
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Immediately call a poison center or doctor/physician.

Ingestion
If swallowed, immediately give 3-4 glasses of milk (if unavailable, give water). Do not induce vomiting. If vomiting occurs, give fluids again. Get immediate medical attention.

Most important symptoms and effects
Symptoms
Hydrogen chloride gas and vapor can cause damage of respiratory tract and nasal passages causing burning, choking, coughing, headaches, and irreversible damage to respiratory tract. Liquid and vapor can cause severe irritation and burning of the skin and eyes. Repeated exposure may cause skin damage. Liquid or vapor can cause severe eye damage and burns including blindness. Ingestion may cause burns of the mouth, esophagus, and stomach.

Indication of any immediate medical attention and special treatment needed

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
Not determined.

Specific Hazards Arising from the Chemical
Product is not flammable.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions
Use personal protective equipment as required.

Environmental Precautions
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment
Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up
Spill area may be slippery. Flood area with water and then mop up. Product may be neutralized with baking soda. Dispose of in accordance with federal, state and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection recommended in Section 8. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash face, hands, and any exposed skin thoroughly after handling. Do not destroy or deface the label.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store at elevated temperatures (above 140 deg. F). Store containers upright. Store locked up.

Incompatible Materials
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>Ceiling: 2 ppm</td>
<td>(vacated) Ceiling: 5 ppm</td>
<td>IDLH: 50 ppm</td>
</tr>
<tr>
<td></td>
<td>(vacated) Ceiling:</td>
<td>Ceiling: 7 mg/m³</td>
<td>Ceiling: 5 ppm</td>
</tr>
<tr>
<td></td>
<td>Ceiling: 7 mg/m³</td>
<td></td>
<td>Ceiling: 7 mg/m³</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>STEL: 400 ppm</td>
<td>TWA: 400 ppm</td>
<td>IDLH: 2000 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA: 200 ppm</td>
<td>TWA: 980 mg/m³</td>
<td>TWA: 400 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 400 ppm</td>
<td>TWA: 980 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 980 mg/m³</td>
<td>STEL: 500 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 500 ppm</td>
<td>STEL: 1225 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) STEL: 1225 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Goggles.

Skin and Body Protection

Rubber gloves. Suitable protective clothing.

Respiratory Protection

Use in well-ventilated area.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State

Liquid

Appearance

Blue liquid

Color

Blue

Odor

Wintergreen

Odor Threshold

Not determined

Property

Values

Remarks • Method

pH

<1.5

Not determined

Melting Point/Freezing Point

Not Applicable

Boiling Point/Boiling Range

Not determined

Flash Point

None (will not burn)

Evaporation Rate

Not determined

Flammability (Solid, Gas)

Liquid-Not Applicable

Upper Flammability Limits

Not determined

Lower Flammability Limit

Not determined

Vapor Pressure

Not Applicable

Vapor Density

Not determined

Specific Gravity

1.044 (1=Water)

Water Solubility

Completely soluble

Solubility in other solvents

Not determined
10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Toxic and corrosive vapors of hydrogen chloride may be produced.

Conditions to Avoid
Contact with incompatible materials. Keep out of reach of children.

Incompatible Materials

Hazardous Decomposition Products
None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Harmful if inhaled.

Ingestion Do not taste or swallow.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>= 700 mg/kg (Rat)</td>
<td>&gt; 5010 mg/kg (Rabbit)</td>
<td>= 3124 ppm (Rat) 1 h</td>
</tr>
<tr>
<td>7647-01-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 4396 mg/kg (Rat)</td>
<td>= 12800 mg/kg (Rat) = 12870 mg/kg (Rabbit)</td>
<td>= 72.6 mg/L (Rat) 4 h</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>= 887 mg/kg (Rat)</td>
<td>= 2500 mg/kg (Rat)  &gt; 5000 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Group 3 IARC components are "not classifiable as human carcinogens".

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>282: 96 h Gambusia affinis mg/L LC50 static</td>
<td>1000: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50</td>
<td>13299: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>1000: 72 h Desmodesmus subspicatus mg/L EC50</td>
<td>9640: 96 h Pimephales promelas mg/L LC50 flow-through 11130: 96 h Pimephales promelas mg/L LC50 static 1400000: 96 h Lepomis macrochirus µg/L LC50</td>
<td>13299: 48 h Daphnia magna mg/L EC50</td>
<td>50: 24 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>Trade Secret</td>
<td></td>
<td></td>
<td></td>
<td>0.05</td>
</tr>
</tbody>
</table>

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging
Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
</table>

Page 6 / 8
14. TRANSPORT INFORMATION

**Note**
Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**
- **UN/ID No**: UN3264
- **Proper Shipping Name**: Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)
- **Hazard Class**: 8
- **Packing Group**: II

**IATA**
- **UN/ID No**: UN3264
- **Proper Shipping Name**: Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)
- **Hazard Class**: 8
- **Packing Group**: II

**IMDG**
- **UN/ID No**: UN3264
- **Proper Shipping Name**: Corrosive liquid, acidic, inorganic, n.o.s. (Hydrochloric acid)
- **Hazard Class**: 8
- **Packing Group**: II

15. REGULATORY INFORMATION

**International Inventories**

**TSCA**
One or more ingredient(s) in this product is listed on the TSCA inventory

Legend:
- **TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**

**US Federal Regulations**

**CERCLA**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>5000 lb</td>
<td>5000 lb</td>
<td>RQ 5000 lb final RQ</td>
</tr>
<tr>
<td>7647-01-0</td>
<td></td>
<td></td>
<td>RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

**SARA 313**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid - 7647-01-0</td>
<td>7647-01-0</td>
<td>10-15</td>
<td>1.0</td>
</tr>
<tr>
<td>Trade Secret -</td>
<td>&lt;1</td>
<td></td>
<td>1.0</td>
</tr>
</tbody>
</table>

**CWA (Clean Water Act)**

<table>
<thead>
<tr>
<th>Component</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
</table>
Hydrochloric acid
7647-01-0 (10-15)  5000 lb  X

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7647-01-0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade Secret</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Trade Secret</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

NFPA

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Physical Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

B = Goggles, gloves

Issue Date: 15-Jan-2009
Revision Date: 08-Sep-2014
Revision Note: New format

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet
1. IDENTIFICATION

Product Identifier
Product Name 20% HCL BOWL CLEANER

Other means of identification
Product Code GEN133

Recommended use of the chemical and restrictions on use
Recommended Use Restroom Care

Details of the supplier of the safety data sheet
Manufactured for
Cole Papers, Inc.
1300 38th st, N.W.
Fargo, ND 58102

Telephone Number
Company Phone Number 1-800-800-8090
Emergency Telephone (24 hr) Chemtel 1-800-255-3924

2. HAZARDS IDENTIFICATION

Color: Clear Amber Appearance: Liquid Odor: Mint

GHS Classification
Corrosive to metals : Category 1
Skin corrosion : Category 1B
Serious eye damage : Category 1
Specific target organ toxicity - single exposure (Inhalation) : Category 3 (Respiratory system)

GHS Label element
Hazard pictograms :

Signal word : Danger

Hazard statements : H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary statements : Prevention:
P234 Keep only in original container.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  

**Response:**  
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.  
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.  
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.  
P363 Wash contaminated clothing before reuse.  
P390 Absorb spillage to prevent material damage.  

**Storage:**  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P406 Store in corrosive resistant stainless steel container with a resistant inner liner.  

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

---  

**Other hazards**  
None known.  

---  

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaternary ammonium compounds, di-C8-10-alkyldimethyl, chlorides</td>
<td>68424-95-3</td>
<td>0.50</td>
</tr>
<tr>
<td>Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides</td>
<td>68424-85-1</td>
<td>0.30</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>80.00 - 100.00</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>20.00</td>
</tr>
<tr>
<td>Nonyl phenol ethoxylate</td>
<td>9016-45-9</td>
<td>1.00 - 5.00</td>
</tr>
</tbody>
</table>

---  

### 4. FIRST-AID MEASURES

**If inhaled**  
Move to fresh air.  
If breathing is irregular or stopped, administer artificial respiration.  
Give oxygen.  
First aider needs to protect himself.  
Call a physician immediately.  

**In case of skin contact**  
Take off all contaminated clothing immediately.  
After contact with skin, wash immediately with plenty of soap and water.
Call a physician immediately.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Call a physician immediately.

If swallowed: Call a physician immediately.
Clean mouth with water and drink afterwards plenty of water.
Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed: No information available.

Notes to physician: No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray
Dry powder
Foam

Specific hazards during firefighting: Heating or fire can release toxic gas.

Further information: Use water spray to cool unopened containers.

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use respirator when performing operations involving potential exposure to vapour of the product.

Environmental precautions

General advice: Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up: Contain spillage, and then collect 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

Advice on safe handling: Avoid contact with skin and eyes.
Provide sufficient air exchange and/or exhaust in work rooms.

Conditions for safe storage: Keep container tightly closed and dry.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>2 ppm</td>
<td></td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceil_Time 5 ppm 7 mg/m3</td>
<td></td>
<td>NIOSH/GUIDE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm 7 mg/m3</td>
<td></td>
<td>OSHA_TRANS</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 ppm 7 mg/m3</td>
<td></td>
<td>Z1A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TLV-C 2 ppm</td>
<td></td>
<td>CAD ON OEL</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Personal protective equipment

Respiratory protection: In the case of vapour formation use a respirator with an approved filter.

Hand protection

Remarks: Wear suitable gloves. Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).

Eye protection: Tightly fitting safety goggles

Face-shield

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Rubber or plastic apron

Rubber or plastic boots

Hygiene measures: Wash hands before breaks and immediately after handling the product.

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothing and gloves, including the inside, before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid

Colour: Clear amber

Odour: Mint

Odour Threshold: no data available

pH: < 1
Melting point/freezing point : no data available
Boiling point/boiling range : no data available
Flash point : no data available
Evaporation rate : no data available
Upper explosion limit : no data available
Lower explosion limit : no data available
Vapour pressure : no data available
Relative vapour density : no data available
Relative density : no data available
Density : 1.04 g/cm³ (25 °C)

Solubility(ies)
Water solubility : soluble
Partition coefficient: n-octanol/water : no data available
Auto-ignition temperature : no data available
Decomposition temperature : no data available
Viscosity, dynamic : no data available
Viscosity, kinematic : no data available

10. STABILITY AND REACTIVITY

Reactivity : Stable under recommended storage conditions.
Possibility of hazardous reactions : None known. Stable
Conditions to avoid : None known.
Incompatible materials : None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Eyes Skin
Ingestion
Inhalation
12. ECOLOGICAL INFORMATION

Ecotoxicity
no data available

Persistence and degradability
no data available

Bioaccumulative potential

Components:
Hydrogen chloride
Partition coefficient: n-octanol/water
log Pow: 0.25

Mobility in soil
no data available

Other adverse effects
Additional ecological information
There is no data available for this product.

13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues
Dispose of in accordance with local regulations.

Contaminated packaging
Dispose of as unused product.
### 14. TRANSPORT INFORMATION

#### IATA

<table>
<thead>
<tr>
<th>UN number</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>Disinfectant, liquid, corrosive, n.o.s. (Hydrogen chloride solution)</td>
</tr>
<tr>
<td>Transport hazard class</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Labels</td>
<td>8</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>no</td>
</tr>
</tbody>
</table>

#### IMDG

<table>
<thead>
<tr>
<th>UN number</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>Liquid, corrosive, n.o.s. (Hydrogen chloride solution)</td>
</tr>
<tr>
<td>Transport hazard class</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Labels</td>
<td>8</td>
</tr>
<tr>
<td>EmS Number 1</td>
<td>F-A</td>
</tr>
<tr>
<td>EmS Number 2</td>
<td>S-B</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>Marine pollutant: no</td>
</tr>
</tbody>
</table>

#### ADR

<table>
<thead>
<tr>
<th>UN number</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>LIQUID, CORROSIVE, N.O.S. (Hydrogen chloride solution)</td>
</tr>
<tr>
<td>Transport hazard class</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Classification Code</td>
<td>C9</td>
</tr>
<tr>
<td>Hazard Identification Number</td>
<td>80</td>
</tr>
<tr>
<td>Labels</td>
<td>8</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>no</td>
</tr>
</tbody>
</table>

#### RID

<table>
<thead>
<tr>
<th>UN number</th>
<th>1903</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper shipping name</td>
<td>LIQUID, CORROSIVE, N.O.S. (Hydrogen chloride solution)</td>
</tr>
<tr>
<td>Transport hazard class</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
</tr>
<tr>
<td>Classification Code</td>
<td>C9</td>
</tr>
<tr>
<td>Hazard Identification Number</td>
<td>80</td>
</tr>
<tr>
<td>Labels</td>
<td>8</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>no</td>
</tr>
</tbody>
</table>
DOT

UN number : 1903
Proper shipping name : Liquid, corrosive n.o.s. (Hydrogen chloride solution)
Transport hazard class : 8
Packing group : III
Labels : 8
Emergency Response Guidebook Number : 153
Environmental hazards : no

TDG

UN number : 1903
Proper shipping name : LIQUID, CORROSIVE, N.O.S. (Hydrogen chloride solution)
Transport hazard class : 8
Packing group : III
Labels : 8
Environmental hazards : no

Special precautions for user : none
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

15. REGULATORY INFORMATION

Signal word : DANGER!
Hazard statements : Causes substantial but temporary eye injury.
Harmful if absorbed through skin.
Harmful if inhaled.
Corrosive. Causes skin burns.
Corrosive. Causes irreversible eye damage.

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>5000</td>
<td>50000</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazards : Acute Health Hazard
SARA 302

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>10 %</td>
</tr>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
<td>10 %</td>
</tr>
</tbody>
</table>

US State Regulations

Massachusetts Right To Know

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
</tr>
</tbody>
</table>

Pennsylvania Right To Know

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
</tr>
</tbody>
</table>

New Jersey Right To Know

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen chloride</td>
<td>7647-01-0</td>
</tr>
</tbody>
</table>

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Revision Date : 2015.06.24
SAFETY DATA SHEET

1. Identification
Product number  1000026290
Product identifier  19OZ GENERATIONS GEN135 GLS CLNR LB 12PK
Company information  COLE PAPERS INC
                      1300 38TH STREET NW
                      FARGO, ND 58102  United States
Company phone  General Assistance 701-282-5311
Emergency telephone US  1-866-836-8855
Emergency telephone outside US  1-952-852-4646
Version #  01
Recommended use  cleaner
Recommended restrictions  None known.

2. Hazard(s) identification
Physical hazards  Gases under pressure
Liquefied gas
Health hazards  Not classified.
Environmental hazards  Not classified.
OSHA defined hazards  Not classified.
Label elements

Signal word  Warning
Hazard statement  Contains gas under pressure; may explode if heated.
Precautionary statement
Prevention  Observe good industrial hygiene practices.
Response  Wash hands after handling.
Storage  Protect from sunlight. Store in a well-ventilated place.
Disposal  Dispose of waste and residues in accordance with local authority requirements.
Hazard(s) not otherwise classified (HNOC)  None known.
Supplemental information  None.

3. Composition/information on ingredients
Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol</td>
<td></td>
<td>111-76-2</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Ethyl Alcohol</td>
<td></td>
<td>64-17-5</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Butane</td>
<td></td>
<td>106-97-8</td>
<td>1 - 2.5</td>
</tr>
<tr>
<td>Propane</td>
<td></td>
<td>74-98-6</td>
<td>1 - 2.5</td>
</tr>
</tbody>
</table>

Other components below reportable levels  90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures
Inhalation  Move to fresh air. Get medical attention if symptoms persist.
Skin contact: Get medical attention if irritation develops and persists.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth.

Most important symptoms/effects, acute and delayed: Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures


Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical: Contents under pressure. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire-fighting equipment/instructions: In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards: No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. See Section 8 of the SDS for Personal Protective Equipment. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling: Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Ground and bond containers when transferring material. Do not re-use empty containers. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Level 1 Aerosol. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Keep containers tightly closed in a dry, cool and well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).
8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>PEL</td>
<td>240 mg/m³</td>
</tr>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td>PEL</td>
<td>50 ppm</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>PEL</td>
<td>1900 mg/m³</td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>TWA</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>TWA</td>
<td>24 mg/m³</td>
</tr>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td>TWA</td>
<td>1900 mg/m³</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>TWA</td>
<td>1800 mg/m³</td>
</tr>
</tbody>
</table>

Biological limit values

ACGIH Biological Exposure Indices

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td>200 mg/g</td>
<td>Butoxyacetic acid (BAA), with hydrolysis</td>
<td>Creatinine in urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

Exposure guidelines

US - California OELs: Skin designation
2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US - Minnesota Haz Subs: Skin designation applies
2-Butoxyethanol (CAS 111-76-2) Skin designation applies.

US - Tennesse OELs: Skin designation
2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation
2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
2-Butoxyethanol (CAS 111-76-2) Can be absorbed through the skin.

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection
If contact is likely, safety glasses with side shields are recommended.

Hand protection
For prolonged or repeated skin contact use suitable protective gloves.

Skin protection
Wear suitable protective clothing.
Respiratory protection: If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator. If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance: Clear.

Physical state: Gas.

Form: Aerosol. Liquefied gas.

Color: Light yellow.

Odor: Characteristic.

Odor threshold: Not available.

pH: 9.1 - 10.1 estimated

Melting point/freezing point: Not available.

Initial boiling point and boiling range: 212 °F (100 °C) estimated

Flash point: -156.0 °F (-104.4 °C) Propellant estimated

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%): Not available.

Flammability limit - upper (%): Not available.

Explosive limit - lower (%): Not available.

Explosive limit - upper (%): Not available.

Vapor pressure: 80 - 100 psig @70F estimated

Vapor density: Not available.

Relative density: Not available.

Solubility(ies)

Solubility (water): Not available.

Partition coefficient (n-octanol/water): Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

Other information

Aerosol spray enclosed space

Deflagration density: > 2.52 g/cm3 Tested

Aerosol spray ignition distance: < 15 cm Tested estimated

Specific gravity: 0.977 - 0.997

10. Stability and reactivity

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use. Hazardous polymerization does not occur.

Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion
Expected to be a low ingestion hazard.

Inhalation
Prolonged inhalation may be harmful.

Skin contact
No adverse effects due to skin contact are expected.

2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

Eye contact
Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity
May be harmful if swallowed. May be harmful in contact with skin. May be harmful if inhaled. Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>230 ml/kg, 24 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.3 ml/kg, 4 Days</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>450 ml/kg, 24 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>435 mg/kg, 24 Hours</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>&gt; 2000 mg/kg, 24 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inhalation</td>
<td>400 ppm, 7 Hours</td>
</tr>
<tr>
<td></td>
<td>Rabbit</td>
<td>450 ppm, 4 Hours</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD100</td>
<td>Rabbit</td>
<td>695 mg/kg</td>
</tr>
<tr>
<td>LD50</td>
<td>Dog</td>
<td>&gt; 695 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Guinea pig</td>
<td>1200 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>530 - 2800 mg/kg</td>
</tr>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>1237 mg/l, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52 %, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>1355 mg/l</td>
</tr>
<tr>
<td>Ethyl Alcohol (CAS 64-17-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Cat</td>
<td>85.41 mg/l, 4.5 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43.68 mg/l, 6 Hours</td>
</tr>
<tr>
<td></td>
<td>Mouse</td>
<td>&gt; 60000 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>79.43 mg/l, 134 Minutes</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>&gt; 115.9 mg/l, 4 Hours</td>
</tr>
</tbody>
</table>
Test Results

Components                      Species               Test Results

Oral                               Monkey           51.3 mg/l, 6 Hours
LD50                               Mouse            6000 mg/kg
                                         Rat              10500 ml/kg
                                         Rat              1187 - 2769 mg/kg
                                         Rat              7800 ml/kg

Propane (CAS 74-98-6)
Acute
Inhalation                          Mouse           6000 mg/kg
LC50                               Mouse           1237 mg/l, 120 Minutes
                                         Rat              1355 mg/l
                                         Rat              658 mg/l/4h

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation          May be irritating to the skin. Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation  Direct contact with eyes may cause temporary irritation. May be irritating to eyes.

Respiratory or skin sensitization
Respiratory sensitization          Not a respiratory sensitizer.
Skin sensitization                 This product is not expected to cause skin sensitization.
Germ cell mutagenicity             No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity                    This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity
2-Butoxyethanol (CAS 111-76-2)     3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Reproductive toxicity              This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity -   Not classified.
  single exposure
Specific target organ toxicity -    Not classified.
  repeated exposure
Aspiration hazard                  Not an aspiration hazard. Not likely, due to the form of the product.
Chronic effects                    Prolonged inhalation may be harmful. May be harmful if absorbed through skin.
                                             2-Butoxy ethanol may be absorbed through the skin in toxic amounts if contact is repeated and prolonged. These effects have not been observed in humans.

12. Ecological information

Ecotoxicity                        Harmful to aquatic life.

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>19OZ GENERATIONS GEN135 GLS CLNR LB 12PK (CAS Mixture)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>13838.1602 mg/l, 48 hours estimated</td>
</tr>
<tr>
<td>Components</td>
<td>Species</td>
<td>Test Results</td>
</tr>
<tr>
<td>2-Butoxyethanol (CAS 111-76-2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>1250 mg/l, 96 hours</td>
</tr>
</tbody>
</table>
Components | Species | Test Results
--- | --- | ---
Ethyl Alcohol (CAS 64-17-5) |  |  
**Aquatic** |  |  
Crustacea | EC50 | Water flea (Daphnia magna) | 7700 - 11200 mg/l, 48 hours
Fish | LC50 | Fathead minnow (Pimephales promelas) | > 100.1 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**
No data is available on the degradability of this product.

**Bioaccumulative potential**
No data available.

**Partition coefficient n-octanol / water (log Kow)**
- 2-Butoxyethanol: 0.83
- Butane: 2.89
- Ethyl Alcohol: -0.31
- Propane: 2.36

**Mobility in soil**
No data available.

**Other adverse effects**
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. **Disposal considerations**

**Disposal instructions**
Consult authorities before disposal. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations**
Dispose in accordance with all applicable regulations.

**Hazardous waste code**
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**Waste from residues / unused products**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. **Transport information**

**DOT**

- **UN number**: UN1950
- **UN proper shipping name**: Aerosols
- **Transport hazard class(es)**
  - **Class**: 2.2
  - **Subsidiary risk**: -
  - **Label(s)**: 2.2
- **Packing group**: Not applicable.
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.
- **Packaging exceptions**: 306
- **Packaging non bulk**: None
- **Packaging bulk**: None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

**IATA**

- **UN number**: UN1950
- **UN proper shipping name**: Aerosols, non-flammable
- **Transport hazard class(es)**
  - **Class**: 2.2
  - **Subsidiary risk**: -
  - **Label(s)**: 2.2
- **Packing group**: Not applicable.
- **Environmental hazards**: No.
- **ERG Code**: 2L
- **Special precautions for user**: Read safety instructions, SDS and emergency procedures before handling.
Other information
Passenger and cargo aircraft Allowed.
Cargo aircraft only Allowed.
Packaging Exceptions LTD QTY

IMDG
UN number UN1950
UN proper shipping name AEROSOLS
Transport hazard class(es)
Class 2.2
Subsidiary risk -
Label(s) None
Packing group Not applicable.
Environmental hazards
Marine pollutant No.
EmS Not available.
Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.
Packaging Exceptions LTD QTY
Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. Regulatory information
US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

- Immediate Hazard - No
- Delayed Hazard - No
- Fire Hazard - No
- Pressure Hazard - Yes
- Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

- Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
  Not regulated.
- Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
  Butane (CAS 106-97-8)
  Propane (CAS 74-98-6)
- Safe Drinking Water Act (SDWA)
  Not regulated.

US state regulations

- US. Massachusetts RTK - Substance List
  2-Butoxyethanol (CAS 111-76-2)
  Butane (CAS 106-97-8)
  Ethyl Alcohol (CAS 64-17-5)
  Propane (CAS 74-98-6)
- US. New Jersey Worker and Community Right-to-Know Act
  2-Butoxyethanol (CAS 111-76-2)
  Butane (CAS 106-97-8)
  Ethyl Alcohol (CAS 64-17-5)
  Propane (CAS 74-98-6)
- US. Pennsylvania Worker and Community Right-to-Know Law
  2-Butoxyethanol (CAS 111-76-2)
  Butane (CAS 106-97-8)
  Ethyl Alcohol (CAS 64-17-5)
  Propane (CAS 74-98-6)
- US. Rhode Island RTK
  Butane (CAS 106-97-8)
  Propane (CAS 74-98-6)
- US. California Proposition 65
  California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
</tbody>
</table>
Country(s) or region | Inventory name | On inventory (yes/no)*
--- | --- | ---
United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 04-02-2015
Version # 01

References
- EPA: AQUIRE database
- NLM: Hazardous Substances Data Base
- US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information
Product and Company Identification: Alternate Trade Names
1. Identification

Product number 1000026291
Product identifier 19OZ GENERATIONS GEN139 FURN POL LB 12PK
Company information COLE PAPERS INC
          1300 38TH STREET NW
          FARGO, ND 58102  United States
Company phone General Assistance 701-282-5311
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 01
Recommended use Not available.
Recommended restrictions None known.

2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Signal word Danger
Hazard statement Extremely flammable aerosol.
Precautionary statement
Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use.
Response Wash hands after handling.
Storage Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal Not available.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td></td>
<td>106-97-8</td>
<td>2.5 - 10</td>
</tr>
<tr>
<td>Propane</td>
<td></td>
<td>74-98-6</td>
<td>1 - 2.5</td>
</tr>
</tbody>
</table>

Other components below reportable levels 90 - 100

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.
Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact Rinse with water. Get medical attention if irritation develops and persists.
Ingestion
Rinse mouth. Get medical attention if symptoms occur.
Direct contact with eyes may cause temporary irritation.

Most important symptoms/effects, acute and delayed
Provide general supportive measures and treat symptomatically.

Indication of immediate medical attention and special treatment needed
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures
Suitable extinguishing media
Not available.

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical
Contents under pressure. Pressurized container may explode when exposed to heat or flame.

Special protective equipment and precautions for firefighters
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Specific methods
Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

General fire hazards
Extremely flammable aerosol.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up
Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage
Precautions for safe handling
Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities
Level 1 Aerosol.
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection
Occupational exposure limits
<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>PEL</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

Product name: 19OZ GENERATIONS GEN139 FURN POL LB 12PK
Product #: 1000026291  Version #: 01  Issue date: 04-01-2015
US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>STEL</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

US. NIOSH: Pocket Guide to Chemical Hazards

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td>TWA</td>
<td>1900 mg/m3</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>TWA</td>
<td>1800 mg/m3</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection
Wear safety glasses with side shields (or goggles).

Hand protection
Wear appropriate chemical resistant gloves.

Skin protection
Wear suitable protective clothing.

Respiratory protection
If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

Thermal hazards
Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations
When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance
Physical state
Gas.
Form
Aerosol.
Color
White.

Odor
Citrus
Odor threshold
Not available.

pH
10 - 11 estimated
Melting point/freezing point
Not available.
Initial boiling point and boiling range
212 °F (100 °C) estimated
Flash point
-156.0 °F (-104.4 °C) Propellant estimated
Evaporation rate
Not available.
Flammability (solid, gas)
Not available.

Upper/lower flammability or explosive limits
Flammability limit - lower (%)
Not available.
Flammability limit - upper (%)
Not available.
Explosive limit - lower (%)
Not available.
Explosive limit - upper (%)
Not available.

Vapor pressure
65 - 85 psig @20C estimated
Vapor density
Not available.
Relative density
Not available.
Solubility(ies)
Solubility (water)
Not available.
Partition coefficient (n-octanol/water)
Not available.

Auto-ignition temperature
Not available.

Decomposition temperature
Not available.

Viscosity
Not available.

Other information
Specific gravity
0.991 - 1.002 estimated

10. Stability and reactivity
Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
Hazardous polymerization does not occur.

Conditions to avoid
Avoid temperatures exceeding the flash point. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Ingestion
Expected to be a low ingestion hazard.

Inhalation
No adverse effects due to inhalation are expected.

Skin contact
No adverse effects due to skin contact are expected.

Eye contact
Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical and toxicological characteristics
Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Components</th>
<th>Specie</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane (CAS 106-97-8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>1237 mg/l, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>1355 mg/l</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>1237 mg/l, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>1355 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>658 mg/l/4h</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation
Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation
Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization
Not available.

Skin sensitization
This product is not expected to cause skin sensitization.

Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not likely, due to the form of the product.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
No data available.

Partition coefficient n-octanol / water (log Kow)
<table>
<thead>
<tr>
<th>Substance</th>
<th>Log Kow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butane</td>
<td>2.89</td>
</tr>
<tr>
<td>Propane</td>
<td>2.36</td>
</tr>
</tbody>
</table>

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

14. Transport information

DOT

UN number
UN1950

UN proper shipping name
Aerosols, flammable

Transport hazard class(es)
Class 2.1
Subsidiary risk -
Label(s) 2.1

Packing group
Not applicable.

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Special provisions
N82

Packaging exceptions
306

Packaging non bulk
None

Packaging bulk
None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

UN number
UN1950

UN proper shipping name
Aerosols, flammable
2.1

Transport hazard class(es)

Class 2.1
Subsidiary risk -
Label(s) 2.1

Packing group Not applicable.
Environmental hazards No.
ERG Code 10L

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Other information
Passenger and cargo aircraft
Allowed.
Carg aircraft only
Allowed.

Packaging Exceptions LTD QTY

IMDG
UN number UN1950
UN proper shipping name AEROSOLS

Transport hazard class(es)

Class 2.1
Subsidiary risk -
Label(s) None

Packing group Not applicable.

Environmental hazards No.

Marine pollutant No.

EmS F-D, S-U

Special precautions for user
Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions LTD QTY

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

DOT

IATA; IMDG

15. Regulatory information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.
SARA 304 Emergency release notification
Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
<table>
<thead>
<tr>
<th>Immediate Hazard</th>
<th>Delayed Hazard</th>
<th>Fire Hazard</th>
<th>Pressure Hazard</th>
<th>Reactivity Hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

SARA 302 Extremely hazardous substance

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Reportable quantity</th>
<th>Threshold planning quantity</th>
<th>Threshold planning quantity, lower value</th>
<th>Threshold planning quantity, upper value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anhydrous Ammonia</td>
<td>7664-41-7</td>
<td>100</td>
<td>500 lbs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SARA 311/312 Hazardous chemical
Not listed.

SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA)
Not regulated.

US state regulations

US. Massachusetts RTK - Substance List
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. New Jersey Worker and Community Right-to-Know Act
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. Rhode Island RTK
Butane (CAS 106-97-8)
Propane (CAS 74-98-6)

US. California Proposition 65
California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>No</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>No</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>No</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
</tbody>
</table>

Product name: 19OZ GENERATIONS GEN139 FURN POL LB 12PK
Product #: 1000026291 Version #: 01 Issue date: 04-01-2015
<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A “Yes” indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A “No” indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

**Issue date**
04-01-2015

**Version #**
01

**Disclaimer**
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision Information**
Product and Company Identification: Alternate Trade Names
SAFETY DATA SHEET

1. Identification
Product number 1000026279
Product identifier 15 OZ GENERATIONS 140 SS CLEANER LB 12PK
Company information COLE PAPERS INC
1300 38TH STREET NW
FARGO, ND 58102 United States
Company phone General Assistance 701-282-5311
Emergency telephone US 1-866-836-8855
Emergency telephone outside US 1-952-852-4646
Version # 01
Recommended use CLEANER
Recommended restrictions None known.

2. Hazard(s) identification
Physical hazards Flammable aerosols Category 1
Health hazards Serious eye damage/eye irritation Category 2A
Specific target organ toxicity, single exposure Category 3 narcotic effects
Aspiration hazard Category 1
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements

Signal word Danger
Hazard statement Extremely flammable aerosol. May be fatal if swallowed and enters airways. Causes serious eye irritation. May cause drowsiness or dizziness.
Precautionary statement
Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Avoid breathing gas. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear eye/face protection.
Response If swallowed: Immediately call a poison center/doctor. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor. Specific treatment (see this label). Do NOT induce vomiting. If eye irritation persists: Get medical advice/attention.
Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients
Mixtures
**4. First-aid measures**

**Inhalation**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Call a POISON CENTER or doctor/physician.

**Skin contact**
Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact**
Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion**
Rinse mouth. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed**
May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Indication of immediate medical attention and special treatment needed**
Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

**General information**
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

**5. Fire-fighting measures**

**Suitable extinguishing media**
Powder. Alcohol resistant foam. Dry chemicals. Carbon dioxide (CO2).

**Unsuitable extinguishing media**
Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical**
Contents under pressure. Pressurized container may explode when exposed to heat or flame.

**Special protective equipment and precautions for firefighters**
Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Fire-fighting equipment/instructions**
Move containers from fire area if you can do so without risk. Cool containers exposed to heat with water spray and remove container, if no risk is involved. Containers should be cooled with water to prevent vapor pressure build up. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

**Specific methods**
Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

**General fire hazards**
Extremely flammable aerosol.

**6. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing gas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up

Refer to attached safety data sheets and/or instructions for use. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Use water spray to reduce vapors or divert vapor cloud drift. Isolate area until gas has dispersed. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. All equipment used when handling the product must be grounded. Do not re-use empty containers. Avoid breathing gas. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Refrigeration recommended. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>PEL</td>
<td>2400 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
<tr>
<td>Methyl Acetate (CAS 79-20-9)</td>
<td>PEL</td>
<td>610 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>PEL</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

**US. ACGIH Threshold Limit Values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>STEL</td>
<td>750 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>500 ppm</td>
</tr>
<tr>
<td>Methyl Acetate (CAS 79-20-9)</td>
<td>STEL</td>
<td>250 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>200 ppm</td>
</tr>
</tbody>
</table>

**US. NIOSH: Pocket Guide to Chemical Hazards**

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>TWA</td>
<td>590 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>250 ppm</td>
</tr>
<tr>
<td>Methyl Acetate (CAS 79-20-9)</td>
<td>STEL</td>
<td>760 mg/m3</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>250 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>610 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>200 ppm</td>
</tr>
<tr>
<td>Propane (CAS 74-98-6)</td>
<td>TWA</td>
<td>1800 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>
**Biological limit values**

<table>
<thead>
<tr>
<th>Components</th>
<th>Value</th>
<th>Determinant</th>
<th>Specimen</th>
<th>Sampling Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetone (CAS 67-64-1)</td>
<td>50 mg/l</td>
<td>Acetone</td>
<td>Urine</td>
<td>*</td>
</tr>
</tbody>
</table>

* - For sampling details, please see the source document.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment**

- **Eye/face protection**
  - Wear safety glasses with side shields (or goggles).

- **Hand protection**
  - Wear appropriate chemical resistant gloves.

- **Skin protection**
  - Wear appropriate chemical resistant clothing.

- **Other**
  - Wear appropriate thermal protective clothing, when necessary.

**Respiratory protection**

- If permissible levels are exceeded use NIOSH mechanical filter / organic vapor cartridge or an air-supplied respirator.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

### 9. Physical and chemical properties

**Appearance**

- Clear.

**Physical state**

- Gas.

**Form**

- Aerosol.

**Color**

- Light yellow.

**Odor**

- Citrus

**Odor threshold**

- Not available.

**pH**

- Not available.

**Melting point/freezing point**

- Not available.

**Initial boiling point and boiling range**

- 38.25 °F (3.47 °C) estimated

**Flash point**

- -156.0 °F (-104.4 °C) Propellant estimated

**Evaporation rate**

- Not available.

**Flammability (solid, gas)**

- Not available.

**Upper/lower flammability or explosive limits**

- **Flammability limit - lower (%)**
  - 2.5 % estimated

- **Flammability limit - upper (%)**
  - 12 % estimated

- **Explosive limit - lower (%)**
  - Not available.

- **Explosive limit - upper (%)**
  - Not available.

**Vapor pressure**

- 45 - 65 psig @70F estimated

**Vapor density**

- Not available.

**Relative density**

- Not available.

**Solubility(ies)**

- **Solubility (water)**
  - Not available.

**Partition coefficient (n-octanol/water)**

- Not available.

**Auto-ignition temperature**

- 505.58 °F (263.1 °C) estimated

**Decomposition temperature**

- Not available.

**Viscosity**

- Not available.
Specific gravity 0.765 - 0.865 estimated

10. Stability and reactivity
Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information
Information on likely routes of exposure
Ingestion Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.
Skin contact No adverse effects due to skin contact are expected.
Eye contact Causes serious eye irritation.
Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness and dizziness. Headache. Nausea, vomiting. Aspiration may cause pulmonary edema and pneumonitis. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effects
Acute toxicity May be fatal if swallowed and enters airways. Toxic if inhaled. Narcotic effects.

Components Species Test Results

Acetone (CAS 67-64-1)

Acute
Dermal
LD50
Guinea pig
> 7426 mg/kg, 24 Hours
> 9.4 ml/kg, 24 Hours

Rabbit
> 7426 mg/kg, 24 Hours
> 9.4 ml/kg, 24 Hours

20 mg/kg

Inhalation
LC50
Rat
55700 ppm, 3 Hours
132 mg/l, 3 Hours
50.1 mg/l

Oral
LD50
Mouse
3000 mg/kg

Rabbit
5340 mg/kg

Rat
5800 mg/kg

2.2 ml/kg

Other
LD50
Mouse
1297 mg/kg

Rat
5500 mg/kg

Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8)

Acute
Dermal
LD50
Rabbit
> 2000 mg/kg
> 2000 mg/kg, 24 Hours

Product name: 15 OZ GENERATIONS 140 SS CLEANER LB 12PK
Product #: 1000026279 Version #: 01 Issue date: 04-02-2015 SDS US
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>&gt; 7.5 mg/l, 6 Hours</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 4.6 mg/l, 4 Hours</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 5000 mg/kg</td>
</tr>
<tr>
<td><strong>Methyl Acetate (CAS 79-20-9)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 2000 mg/kg, 24 Hours</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC100</td>
<td>Rabbit</td>
<td>98.4 mg/l, 4 Hours</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>6482 mg/kg</td>
</tr>
<tr>
<td><strong>Propane (CAS 74-98-6)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Mouse</td>
<td>1237 mg/l, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>52 %, 120 Minutes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>1355 mg/l</td>
</tr>
<tr>
<td></td>
<td></td>
<td>658 mg/l/4h</td>
</tr>
<tr>
<td><strong>White Mineral Oil (CAS 8042-47-5)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rabbit</td>
<td>&gt; 2000 mg/kg, 24 Hours</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LC50</td>
<td>Rat</td>
<td>2.18 mg/l, 4 Hours</td>
</tr>
<tr>
<td><strong>Oral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>5000.0001 mg/kg</td>
</tr>
<tr>
<td>* Estimates for product may be based on additional component data not shown.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**
- Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation**
- Causes serious eye irritation.

**Respiratory or skin sensitization**
- **Respiratory sensitization**: Not available.
- **Skin sensitization**: This product is not expected to cause skin sensitization.

**Germ cell mutagenicity**
- No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity**
- This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

- Not listed.

**Reproductive toxicity**
- This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure**
- May cause drowsiness and dizziness.

**Specific target organ toxicity - repeated exposure**
- Not classified.

**Aspiration hazard**
- May be fatal if swallowed and enters airways.

**Chronic effects**
- Prolonged inhalation may be harmful.

**12. Ecological information**
- **Ecotoxicity**: Harmful to aquatic life with long lasting effects.
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acetone (CAS 67-64-1)</strong></td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia magna)</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td><strong>Distillates (Petroleum), Hydrotreated Light (CAS 64742-47-8)</strong></td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Rainbow trout, donaldson trout (Oncorhynchus mykiss)</td>
</tr>
<tr>
<td><strong>Methyl Acetate (CAS 79-20-9)</strong></td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>IC50</td>
<td>Algae</td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Daphnia</td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fathead minnow (Pimephales promelas)</td>
</tr>
<tr>
<td><strong>Odorless Mineral Spirits (CAS 64741-65-7)</strong></td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Algae</td>
<td>IC50</td>
<td>Algae</td>
</tr>
<tr>
<td><strong>White Mineral Oil (CAS 8042-47-5)</strong></td>
<td><strong>Aquatic</strong></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50</td>
<td>Fish</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Persistence and degradability**
No data is available on the degradability of this product.

**Bioaccumulative potential**
No data available.

**Partition coefficient n-octanol / water (log Kow)**
- Acetone: -0.24
- Methyl Acetate: 0.18
- Propane: 2.36

**Mobility in soil**
No data available.

**Other adverse effects**
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**13. Disposal considerations**

**Disposal instructions**
Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations**
Dispose in accordance with all applicable regulations.

**Hazardous waste code**
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

**US RCRA Hazardous Waste U List: Reference**
- **Acetone (CAS 67-64-1)**: U002

**Waste from residues / unused products**
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Do not re-use empty containers.

**14. Transport information**

**DOT**
- **UN number**: UN1950
- **UN proper shipping name**: Aerosols, flammable
Transport hazard class(es)

| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |

Packing group
- Not applicable.

Special precautions for user
- Read safety instructions, SDS and emergency procedures before handling.

Special provisions
- N82

Packaging exceptions
- 306

Packaging non bulk
- None

Packaging bulk
- None

This product meets the exception requirements of section 173.306 as a limited quantity and may be shipped as a limited quantity. Until 12/31/2020, the "Consumer Commodity - ORM-D" marking may still be used in place of the new limited quantity diamond mark for packages of UN 1950 Aerosols. Limited quantities require the limited quantity diamond mark on cartons after 12/31/20 and may be used now in place of the "Consumer Commodity ORM-D" marking and both may be displayed concurrently.

IATA

| UN number | UN1950 |
| UN proper shipping name | Aerosols, flammable |

Transport hazard class(es)

| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |

Packing group
- Not applicable.

Environmental hazards
- No.

ERG Code
- 10L

Special precautions for user
- Read safety instructions, SDS and emergency procedures before handling.

Other information
- Passenger and cargo aircraft
  - Allowed.
- Cargo aircraft only
  - Allowed.

Packaging Exceptions
- LTD QTY

IMDG

| UN number | UN1950 |
| UN proper shipping name | AEROSOLS |

Transport hazard class(es)

| Class | 2.1 |
| Subsidiary risk | - |
| Label(s) | 2.1 |

Packing group
- Not applicable.

Environmental hazards
- No.

Marine pollutant
- No.

EmS
- F-D, S-U

Special precautions for user
- Read safety instructions, SDS and emergency procedures before handling.

Packaging Exceptions
- LTD QTY

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Not applicable.

DOT

Product name: 15 OZ GENERATIONS 140 SS CLEANER LB 12PK
Product #: 1000026279  Version #: 01  Issue date: 04-02-2015  SDS US
15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)
Acetone (CAS 67-64-1) Listed.

SARA 304 Emergency release notification
Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - Yes
Pressure Hazard - Yes
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Acetaldehyde</td>
<td>75-07-0</td>
<td>0.01 - 0.1</td>
</tr>
</tbody>
</table>

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Propane (CAS 74-98-6)

Safe Drinking Water Act (SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number
Acetone (CAS 67-64-1) 6532

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))
Acetone (CAS 67-64-1) 35 %WV

DEA Exempt Chemical Mixtures Code Number
Acetone (CAS 67-64-1) 6532

US state regulations

US. Massachusetts RTK - Substance List
Acetone (CAS 67-64-1)
Methyl Acetate (CAS 79-20-9)
Propane (CAS 74-98-6)
US. New Jersey Worker and Community Right-to-Know Act
Acetone (CAS 67-64-1)
Methyl Acetate (CAS 79-20-9)
Propane (CAS 74-98-6)

US. Pennsylvania Worker and Community Right-to-Know Law
Acetone (CAS 67-64-1)
Methyl Acetate (CAS 79-20-9)
Propane (CAS 74-98-6)

US. Rhode Island RTK
Acetone (CAS 67-64-1)
Propane (CAS 74-98-6)

US. California Proposition 65
WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance
Acetaldehyde (CAS 75-07-0) Listed: April 1, 1988

US - California Proposition 65 - CRT: Listed date/Developmental toxin
Methanol (CAS 67-56-1) Listed: March 16, 2012

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or region</th>
<th>Inventory name</th>
<th>On inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Yes</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>No</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
<td>No</td>
</tr>
<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
<td>Yes</td>
</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
<td>No</td>
</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
<td>No</td>
</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
<td>No</td>
</tr>
<tr>
<td>United States &amp; Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision
Issue date 04-02-2015
Version # 01
Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision Information
Product and Company identification: Alternate Trade Names
HILLYARD INDUSTRIES
SAFETY DATA SHEET

1. Identification
Product Identifier: HILLYARD CLEAN ASSIST #97 HCL-145
Application or recommended use: Acid toilet bowl cleaner
Restrictions on use: Do not use in any fashion not specified on the product label.
Manufacturer / supplier: Hillyard Industries
302 N. Fourth Street
St. Joseph, MO 64501 USA

2. Hazards Identification
GHS Classification: Classification of this mixture in accordance with paragraph (d) of §1910.1200.
Acute Toxicity (Oral) - Category 4
Skin Corrosion/Irritation - Category 1B
Eye Damage/Irritation - Category 1
STOT-SE - Category 3 (Respiratory irritation)
Corrosive to Metals - 1

Label Elements:
Symbol: ⚠️ ⚠️
Signal word: DANGER
Hazard statements: Harmful if swallowed. Causes severe skin burns and serious eye damage.
May cause respiratory irritation. May be corrosive to metals.
Precautionary statements: Do not breathe fume/mist/vapors/spray. Use only in a well-ventilated area.
Wash hands, face and any skin contact thoroughly after handling.
Use protective gloves/protective clothing/eye protection/face protection.
Do not eat, drink or smoke when using this product.
Keep only in original container. Absorb spillage to prevent material damage.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Store locked up in a corrosive resistant container, in a well-ventilated place. Keep container tightly closed. Dispose of contents/container to an approved disposal facility.

Other Hazards: None known

3. Composition / Information on Ingredients
Chemical characterization: Hydrochloric acid solution, blended with detergents, germicides and auxiliary agents.
Hazardous ingredients: The exact percentage of composition has been withheld as a trade secret.
14.5% Hydrochloric acid (Muriatic acid) CAS 7647-01-0, EINECS/ELINCS 231-595-7
1.6% Ethanol, 2,2’-(9-octadecenylimino)bis-, (z)- CAS 13127-82-7, EINECS/ELINCS Not Available
Other ingredients (> 1%): > 80% Water CAS 7732-18-5, EINECS/ELINCS 231-791-2

4. First-Aid Measures
Symptoms: Causes irritation or burning sensation. Harmful if swallowed. Causes severe skin burns and serious eye damage.
May cause respiratory irritation. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.
Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
Skin Contact: Remove contaminated clothing and wash before reuse. Wash contaminated area with soap and water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
4. First-Aid Measures (cont.)

Inhalation: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth to an unconscious person. If respiratory irritation, dizziness, or unconsciousness occurs, seek immediate medical assistance.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to a person who is unconscious or convulsing. If vomiting occurs, keep head below hips to reduce risk of aspiration. Probable mucosal damage may contraindicate the use of gastric lavage.

Note to Physician: Treat exposed patients symptomatically.

5. Fire-Fighting Measures

Suitable Extinguishing Media: Not applicable. Product is not a fire hazard.

Unsuitable Extinguishing Media: High pressure water jet.

Specific hazards in case of fire: Hydrogen chloride gas may be generated at high temperatures.

Special Fire Fighting Precautions: Fire fighters should wear appropriate protective equipment, including self-contained breathing apparatus and impervious clothing.

6. Accidental Release Measures

Emergency Procedures: Depending on the extent of release, consider the need for emergency responders with adequate personal protective equipment for clean-up, need for evacuation or restriction of access to spill area.

Personal Precautions: Provide adequate ventilation. Do not eat, drink or smoke during clean up. If necessary, use self-contained respirator, or filtered mask. Wear protective clothing, eye protection and impervious gloves (e.g. neoprene). Wash thoroughly after clean up.

Environmental Precautions: Prevent spills from entering storm sewers/drains or contact with soil.

Clean up Methods: Small spills may be wiped up and rinsed with water. For larger spills, neutralize with sodium carbonate and absorb on fire retardant material (e.g. sand). Pick up absorbent and dispose of at an appropriate waste disposal facility.

7. Handling and Storage

Precautions for Safe Handling: Never use with chlorine products. Can react to give chlorine gas. If this occurs, flush toilet to remove chemicals and leave area. Do not return for half hour. Ventilate if possible. Never use or mix with other cleaners or chemicals. Do not use on any surface that can be damaged by acid materials. Do not breathe mist/vapors. Wash hands, face and any skin contact thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, protective clothing, eye protection, face protection. Use product only according to label directions. If unsure about safe use, contact your supervisor immediately. Provide adequate ventilation in use.

Conditions for Safe Storage: Keep out of reach of children. Do not contaminate water, food or feed by storage and disposal. Store locked up in tightly closed, original, corrosive resistant container in a cool (10° - 30°C), dry, well-ventilated area.

Incompatibility: Chlorine bleach, alkali. Do not mix with anything but water.

8. Exposure Controls / Personal Protection

Components with occupational exposure limits:

<table>
<thead>
<tr>
<th>Component</th>
<th>Reference</th>
<th>TWA</th>
<th>PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrochloric acid</td>
<td>ACGIH</td>
<td>2 ppm (C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSHA</td>
<td>5 ppm (C)</td>
<td></td>
</tr>
</tbody>
</table>

Engineering Controls: Proper ventilation in accordance with good industrial hygiene should be provided.

Personal Protective Equipment

Respiratory: Respiratory protection is not necessary under normal conditions of use. If necessary to prevent exposure above occupational limits, use an approved cartridge style respirator.

Gloves: Use water impervious gloves (latex or neoprene rubber). No breakthrough time has been established.

Eye Protection: Chemical resistant goggles and face protection.

Other: Protective clothing (long sleeves, pants), eyewash, safety shower are always advisable when working with chemicals.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State -</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color -</td>
<td>Purple</td>
</tr>
<tr>
<td>Odor -</td>
<td>Mint, acidic</td>
</tr>
<tr>
<td>Odor Threshold -</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling Point -</td>
<td>195°F</td>
</tr>
<tr>
<td>Decomposition temperature -</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing Point -</td>
<td>&lt; 0°F</td>
</tr>
<tr>
<td>pH (Neat) -</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Relative Density -</td>
<td>1.068</td>
</tr>
<tr>
<td>Evaporation Rate -</td>
<td>Similar to water</td>
</tr>
</tbody>
</table>

| Auto-ignition temperature - | Not applicable |
| Flash Point -               | None         |
| Flammability -              | Not applicable |
| Flammability Limits -       | Not applicable |
| Partition coefficient -     | Not applicable |
| Solubility (Water) -        | Complete     |
| Vapor Density -             | No data available |
| Vapor Pressure -            | No data available |
| Viscosity -                 | Slightly viscous |
| % VOC -                     | < 0.5 (Excluding LVP material) |
10. Stability and Reactivity

Reactivity: No specific reactivity test data is available. Under normal conditions of storage and use, hazardous reactions are not expected.

Incompatible materials: Mixing with bleach, alkali, or oxidizers may generate toxic gases.

Chemical stability: This product is stable at ambient temperatures and pressures.

Conditions to avoid: Temperatures above 50°F or below 10°F.

Hazardous decomposition products: Hydrogen chloride

11. Toxicological Information

Acute Toxicity: Toxicity data is not available for this mixture. Data below are estimates based on summation methods.

<table>
<thead>
<tr>
<th>Test</th>
<th>Results</th>
<th>Classification (A.0.4.1(c))</th>
<th>Basis (A.1.3.6.1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>&gt; 1560mg/kg</td>
<td>Category 4</td>
<td>Ingredient literature (Additive formula)</td>
</tr>
<tr>
<td>Dermal</td>
<td>&gt; 2000mg/kg</td>
<td>Not applicable</td>
<td>Ingredient literature (Additive formula)</td>
</tr>
<tr>
<td>Inhalation</td>
<td>&gt; 20 mg/L</td>
<td>Not applicable</td>
<td>Ingredient literature (Additive formula)</td>
</tr>
</tbody>
</table>

Eye Damage/Irritation: Corrosion Category 1 Ingredient literature

Skin Damage/Irritation: Corrosion Category 1B Ingredient literature

Summary: Skin and eye contact are most likely routes of exposure. Exposure causes skin burns and serious eye damage.

Subchronic/Chronic Toxicity:

<table>
<thead>
<tr>
<th>Test</th>
<th>Results</th>
<th>Classification</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Sensitization</td>
<td>Not a sensitizer</td>
<td>Not applicable</td>
<td>Ingredient literature.</td>
</tr>
</tbody>
</table>

Summary: Repeated or prolonged contact causes skin burns and eye damage.

Carcinogens - Ingredients are not listed on the NTP Report on Carcinogens, IARC Monographs or by OSHA

Other data - No other toxicological information is available for this mixture.

12. Ecological Information

This material has not been tested for acute environmental effects.

Persistence and degradability: Material is not persistent. All organic components > 1% are readily biodegradable.

Bio-accumulative potential: No evidence to suggest bio-accumulation will occur.

Mobility: Accidental spillage may lead to penetration of soil and groundwater. However, due to degradability, no evidence suggests this would cause adverse ecological effects. Material will lower pH of affected area.

13. Disposal Considerations

RCRA Class - D002. Do not contaminate water, food or feed by disposal. If material cannot be disposed of by use according to label directions, contact your State Environmental Control Agency, or the hazardous waste representative at the nearest EPA Regional Office for guidance. Rinse container after emptying. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill. If container is one gallon or less, wrap empty container in plastic bag and discard in trash.

14. Transport Information

Proper Shipping Name: UN1789 Hydrochloric acid solution RQ - 5000 Lbs. (Hydrochloric Acid)

Shipping emergency phone: 800-424-9300

Transport hazard class: 8 Hazard Label: Corrosive (When shipped as a Limited Quantity, labeling is not required.)

Packing Group: II Emergency Guide No.: 154 Marine Pollutant: No

15. Regulatory Information

Inventory status: All components are listed on TSCA(US), EINECS/ELINCS(EU), DSL(Canada), AICS(Australia), ENCS(Japan).

OSHA Hazard Communication Standard: This product meets the §1910.1200 definition of a "Hazardous Chemical".

Superfund Amendments and Reauthorization Act of 1986 Title III (EPCRA) Sections 311 and 312

Immediate (Acute) Health Hazard: Yes Delayed (Chronic) Health Hazard: No

Fire Hazard: No Reactive Hazard: No

Sudden Release of Pressure Hazard: No

Superfund Amendments and Reauthorization Act of 1986 Title III (EPCRA) Section 313

*Chemicals marked with an asterisk in “3. Composition/Information on Ingredients” are subject to reporting requirements for Section 313 of Title III of the Superfund Amendments and Reauthorization Act(SARA) of 1986 and 40CFR Part 372.

Pennsylvania/New Jersey/Massachusetts Right to Know

See “3. Composition/Information on Ingredients” for hazardous and top five ingredients over 1% (w/w).

California Proposition 65: This product does not contain a listed substance known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.
16. Other information
Date issued: 31.12.2014  F315-001
Revision: 03.06.2015 Version 002  Removed EPA registration information

Disclaimer: No representation or warranty, either expressed or implied, of merchantability, fitness for a particular purpose, or of any other nature, is made with respect to information concerning the product referred to in this document. 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, it is impossible to foresee every health effect or exposure risk incurred by the use of this product. All chemicals present some degree of hazard and should be used with caution. The information and recommendations contained herein are presented in good faith. The user should review this information in conjunction with their knowledge of the application intended to determine the suitability of this product for such purpose. In no event will the supplier be responsible for any damages of any nature whatsoever, resulting from the use, reliance upon, or the misuse of this information. Furthermore, it is the direct responsibility of the user to comply with all applicable regulations governing the use and disposal of this material.

Prepared by: R&D
SAFETY DATA SHEET
HEAVY DUTY ACID BOWL AND BATHROOM CLEANER

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : HEAVY DUTY ACID BOWL AND BATHROOM CLEANER
Other means of identification : not applicable
Recommended use : Cleaning product
Restrictions on use : Reserved for industrial and professional use.
Product dilution information : 20.3 % - 33.6 %

Company : PureForce
370 N. Wabasha Street
St. Paul, Minnesota USA 55102
1-866-444-7450

Emergency telephone : 1-800-328-0026 (US/Canada), 1-651-222-5352 (outside US)
Issuing date : 06/26/2014

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Product AS SOLD
Flammable liquids : Category 4
Skin corrosion : Category 1A
Serious eye damage : Category 1

Product AT USE DILUTION
Skin corrosion : Category 1A
Serious eye damage : Category 1

GHS Label element
Product AS SOLD
Hazard pictograms : 

Signal Word : Danger
Hazard Statements : Combustible liquid
Causes severe skin burns and eye damage.
Precautionary Statements : Prevention:
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Wash skin thoroughly after handling. Wear protective gloves/ protective clothing/ eye protection/ face protection. Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Response:
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing.
Rinse skin with water/ shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove
HEAVY DUTY ACID BOWL AND BATHROOM CLEANER

Product AT USE DILUTION

Hazard pictograms

Signal Word

Hazard Statements

Precautionary Statements

Prevention:
Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse.

Storage:
Store in a well-ventilated place. Keep cool. Store locked up.

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

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product AS SOLD

Pure substance/mixture: Mixture

Chemical Name                                      CAS-No.      Concentration (%)

alcohol ethoxylate                                  68551-12-2  5 - 10
hydrochloric acid                                   7647-01-0   5 - 10

Product AT USE DILUTION

Chemical Name                                      CAS-No.      Concentration (%)

alcohol ethoxylate                                  68551-12-2  1 - 5
hydrochloric acid                                   7647-01-0   1 - 5

SECTION 4. FIRST AID MEASURES

Product AS SOLD

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
In case of skin contact: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

Protection of first-aiders: If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician: Treat symptomatically.

**Product AT USE DILUTION**

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

In case of skin contact: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

If swallowed: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.

If inhaled: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

See toxicological information (Section 11)

**SECTION 5. FIRE-FIGHTING MEASURES**

**Product AS SOLD**

Suitable extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media: High volume water jet

Specific hazards during fire fighting: Fire Hazard
Keep away from heat and sources of ignition.
Flash back possible over considerable distance.

Hazardous combustion products: Decomposition products may include the following materials:
- Carbon oxides
- Nitrogen oxides (NOx)
- Sulfur oxides
- Oxides of phosphorus

Special protective equipment for fire-fighters: Use personal protective equipment.

Specific extinguishing methods: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire...
SECTION 6. ACCIDENTAL RELEASE MEASURES

**Product AS SOLD**

**Personal precautions, protective equipment and emergency procedures**: Ensure adequate ventilation. Remove all sources of ignition. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

**Environmental precautions**: Do not allow contact with soil, surface or ground water.

**Methods and materials for containment and cleaning up**: Eliminate all ignition sources if safe to do so. Stop leak if safe to do so. Contain spillage, and then collect 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). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

**Product AT USE DILUTION**

**Personal precautions, protective equipment and emergency procedures**: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

**Environmental precautions**: Do not allow contact with soil, surface or ground water.

**Methods and materials for containment and cleaning up**: Stop leak if safe to do so. Contain spillage, and then collect 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). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

SECTION 7. HANDLING AND STORAGE

**Product AS SOLD**

**Advice on safe handling**: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Use only with adequate ventilation. Keep away from fire, sparks and heated surfaces. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

**Conditions for safe storage**: Keep away from heat and sources of ignition. Keep away from oxidizing agents. Keep away from strong bases. Keep out of reach of children. Store in suitable labeled containers.

**Storage temperature**: 10 °C to 45 °C

**Product AT USE DILUTION**
Advice on safe handling: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Use only with adequate ventilation. Wash hands thoroughly after handling.


### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Product AS SOLD

**Ingredients with workplace control parameters**

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Form of exposure</th>
<th>Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrochloric acid</td>
<td>7647-01-0</td>
<td>Ceiling</td>
<td>2 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ceiling</td>
<td>5 ppm</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7 mg/m³</td>
<td>OSHA Z1</td>
</tr>
</tbody>
</table>

Engineering measures: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

**Personal protective equipment**

**Eye protection**: Safety goggles
Face-shield

**Hand protection**: Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

**Skin protection**: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

**Respiratory protection**: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Hygiene measures**: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

#### Product AT USE DILUTION

**Engineering measures**: Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

**Personal protective equipment**

**Eye protection**: Safety goggles
Face-shield

**Hand protection**: Wear the following personal protective equipment:
Standard glove type.
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.
SAFETY DATA SHEET

HEAVY DUTY ACID BOWL AND BATHROOM CLEANER

Skin protection: Personal protective equipment comprising: suitable protective gloves, safety goggles and protective clothing

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Product AS SOLD</th>
<th>Product AT USE DILUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>clear, light blue</td>
<td>light blue</td>
</tr>
<tr>
<td>Odor</td>
<td>Perfumes, fragrances</td>
<td>slight</td>
</tr>
<tr>
<td>pH</td>
<td>1, 100 %</td>
<td>0.57 - 0.79</td>
</tr>
<tr>
<td>Flash point</td>
<td>84 °C closed cup</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>1.018 - 1.038</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>no data available</td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>no data available</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 10. STABILITY AND REACTIVITY

Product AS SOLD

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Do not mix with bleach or other chlorinated products – will cause chlorine gas.
Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Bases

Hazardous decomposition products: Decomposition products may include the following materials:
- Carbon oxides
- Nitrogen oxides (NOx)
- Sulfur oxides
- Oxides of phosphorus

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure: Inhalation, Eye contact, Skin contact

Potential Health Effects

Product AS SOLD

Eyes: Causes serious eye damage.

Skin: Causes severe skin burns.

Ingestion: Causes digestive tract burns.

Inhalation: May cause nose, throat, and lung irritation.

Chronic Exposure: Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes: Causes serious eye damage.

Skin: Causes severe skin burns.

Ingestion: Causes digestive tract burns.

Inhalation: May cause nose, throat, and lung irritation.

Chronic Exposure: Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact: Redness, Pain, Corrosion

Skin contact: Redness, Pain, Corrosion

Ingestion: Corrosion, Abdominal pain

Inhalation: Respiratory irritation, Cough

Product AT USE DILUTION

Eye contact: Redness, Pain, Corrosion

Skin contact: Redness, Pain, Corrosion

Ingestion: Corrosion, Abdominal pain

Inhalation: Respiratory irritation, Cough
SAFETY DATA SHEET

HEAVY DUTY ACID BOWL AND BATHROOM CLEANER

Toxicity

Product AS SOLD

Acute oral toxicity : Acute toxicity estimate : > 5,000 mg/kg
Acute inhalation toxicity : 4 h Acute toxicity estimate : > 40 mg/l
Acute dermal toxicity : no data available
Skin corrosion/irritation : no data available
Serious eye damage/eye irritation : no data available
Respiratory or skin sensitization : no data available
Carcinogenicity : no data available
Reproductive effects : no data available
Germ cell mutagenicity : no data available
Teratogenicity : no data available
STOT-single exposure : no data available
STOT-repeated exposure : no data available
Aspiration toxicity : no data available

Ingredients

Acute dermal toxicity : alcohol ethoxylate
LD50 rabbit: > 2,000 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Product AS SOLD

Ecotoxicity

Environmental Effects : Harmful to aquatic life.

Product

Toxicity to fish : no data available
Toxicity to daphnia and other aquatic invertebrates : no data available
Toxicity to algae : no data available

Ingredients

Toxicity to fish : alcohol ethoxylate
96 h LC50 Fish: 1.5 mg/l

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Other adverse effects
SECTION 13. DISPOSAL CONSIDERATIONS

Product AS SOLD
Disposal methods: The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers.


Product AT USE DILUTION
Disposal methods: Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.

Disposal considerations: Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers.

SECTION 14. TRANSPORT INFORMATION

Product AS SOLD
The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (DOT)
UN number: 1789
Description of the goods: Hydrochloric acid
Class: 8
Packing group: II
Environmentally hazardous: no

Sea transport (IMDG/IMO)
UN number: 1789
Description of the goods: HYDROCHLORIC ACID
Class: 8
Packing group: II
Marine pollutant: no

Product AT USE DILUTION
Not intended for transport.

SECTION 15. REGULATORY INFORMATION

Product AS SOLD
EPCRA - Emergency Planning and Community Right-to-Know
CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrochloric acid</td>
<td>7647-01-0</td>
<td>5000</td>
<td>83542</td>
</tr>
</tbody>
</table>

SARA 304 Extremely Hazardous Substances Reportable Quantity

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrochloric acid</td>
<td>7647-01-0</td>
<td>5000</td>
<td>83542</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazards
: Fire Hazard
: Acute Health Hazard

SARA 302
: The following components are subject to reporting levels established by SARA Title III, Section 302:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrochloric acid</td>
<td>7647-01-0</td>
<td></td>
<td>5.985 %</td>
</tr>
</tbody>
</table>

SARA 313
: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

California Prop 65
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

The ingredients of this product are reported in the following inventories:

1907/2006 (EU)
: not determined

Switzerland. New notified substances and declared preparations
: The mixture contains substances listed on the Swiss Inventory on the inventory, or in compliance with the inventory

United States TSCA Inventory
: On TSCA Inventory

Canadian Domestic Substances List (DSL)
: All components of this product are on the Canadian DSL.

Australia Inventory of Chemical Substances (AICS)
: On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemical Substances
: On the inventory, or in compliance with the inventory

Japan. ENCS - Existing and New Chemical Substances Inventory
: not determined

Japan. ISHL - Inventory of Chemical Substances (METI)
: not determined

Korea. Korean Existing Chemicals Inventory (KECI)
: not determined

Philippines Inventory of Chemicals and Chemical Substances (PICCS)
: not determined
SAFETY DATA SHEET
HEAVY DUTY ACID BOWL AND BATHROOM CLEANER

China. Inventory of Existing Chemical Substances in China (IECSC): not determined

SECTION 16. OTHER INFORMATION

Product AS SOLD
NFPA:

HMIS III:

Product AT USE DILUTION
NFPA:

HMIS III:

Issuing date : 06/26/2014
Version : 1.0
Prepared by : Regulatory Affairs

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.