

# SAFETY DATA SHEET

## Section 1: Chemical Product and Company Information

### 1.1 Product Identifier

Product Name: KaiBosh

### 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: Water Soluble Cleaner

### 1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer: Kaivac Cleaning Systems  
401 South Third St.  
Hamilton, OH 45011

**1.4 Emergency Telephone Number:** 800-287-1136  
**Telephone Number for Information:** 800-287-1136

**Email:**

**SDS Date of Preparation/Revision:** June 20, 2015

## Section 2: Hazards Identification

### 2.1 Classification of the Substance or Mixture

**EU Classification (1272/2008):** Eye Damage Category 1 (H318)  
Skin Irritation Category 2 (H315)

**EU Classification (1999/45/EC):** Xi R41, R38

**US OSHA Classification (29CFR1910.1200):** Eye Damage Category 1  
Skin Irritation Category 2

Refer to Section 16 for Full Text of EU Classes and R Phrases

### 2.2 Label Elements:



**DANGER!** Contains Secondary Ethoxylate, Tetrasodium Ethylene Diamine Tetraacetate, Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides and Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides.

H315 Causes skin irritation

H318 Causes serious eye damage.

**Prevention:**

P264 Wash thoroughly after handling.

P280 Wear gloves and eye protection.

**Response:**

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

P310 Immediately call a POISON CENTER or doctor.

P302+P352 IF ON SKIN: Wash with plenty of water.

P332+P313 If skin irritation occurs: Get medical attention.

P362+P364 Take off contaminated clothing and wash it before reuse.

**2.3 Other Hazards:** Contains oils, sweet orange and geraniol may produce an allergic reaction.

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| <b>Section 3: Composition/Information on Ingredients</b> |
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### 3.2 Mixture

| Component  | CAS Number/<br>EINECS Number | Amount   | EU/GHS Classification (1272/2008)   |
|--|------------------------------|----------|---|
| Water  | 7732-18-5/231-791-2          | 78-83%   | Not Hazardous   |
| Non-Ionic Surfactant:<br>C11-C15 Secondary<br>Alcohol Ethoxylate                               | 84133-50-6/617-534-0         | 4.3-4.7% | Skin Irritation Category 2 (H315)<br>Eye Damage Category 1 (H318)<br>Acute Toxicity Category 4 (H302, H312,<br>H332)  |
| Sodium Carbonate   | 497-19-8/207-838-8           | 2-3%     | Eye Irritation Category 2 (H319)  |
| Tetrasodium Ethylene<br>Diamine Tetraacetate   | 64-02-8/200-573-9            | 2-3%     | Eye Damage Category 1 (H315)<br>Acute Toxicity Category 4 (H332)  |
| Quaternary ammonium<br>compounds, benzyl-<br>C12-18-alkyldimethyl,<br>chlorides                | 68391-01-5/269-919-4         | 2-3%     | Skin Corrosion Category 1B (H314)<br>Acute Toxicity Category 4 (H302, H312)   |
| Quaternary ammonium<br>compounds, C12-14-<br>alkyl[(ethylphenyl)met<br>hyl]dimethyl, chlorides | 85409-23-0/287-090-7         | 2-3%     | Skin Corrosion Category 1B (H314)<br>Acute Toxicity Category 4 (H302, H312)   |
| Ethanol  | 64-17-5/200-578-6            | <1%      | Flammable Liquid Category 2 (H225)<br>Eye Irritation Category 2 (H319)  |
| Fragrance  | Mixture                      | <0.3%    | Flammable Liquid Category 3 (H226)<br>Skin Irritation Category 2 (H315)<br>Eye Damage Category 1 (H315)<br>Skin Sensitization Category 1 (H317)<br>Aquatic Acute Toxicity Category 1 (H400)<br>Aquatic Chronic Toxicity Category 1 (H410) |

Refer to Section 16 for Full Text of GHS Classes and H Statements

The exact percentages are a trade secret.

|                                      |
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| <b>Section 4: First Aid Measures</b> |
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#### 4.1 Description of First Aid Measures

##### First Aid

**Eyes:** Immediately flush eyes with water for at least 20 minutes while lifting the upper and lower lids. Get immediate medical attention.

**Skin:** Wash off with water. Remove contaminated clothing and launder before reuse. If irritation develops and persists, get medical attention.

**Ingestion:** If conscious, rinse mouth with water and give 1 glass of water to dilute. Do not induce vomiting. Never give anything by mouth to a person who is unconscious or convulsing. Get medical attention.

**Inhalation:** Move person to fresh air. Seek medical attention if irritation or other symptoms persist.

**See Section 11 for more detailed information on health effects.**

**4.2 Most Important symptoms and effects, both acute and delayed:** Causes severe eye irritation or burns. Permanent damage may occur. Inhalation of mists may cause upper respiratory irritation. Swallowing may cause gastrointestinal irritation. Prolonged skin contact may cause irritation and dryness.

**4.3 Indication of any immediate medical attention and special treatment needed:** If eye contact occurs, get immediate medical attention.

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### Section 5: Fire Fighting Measures

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**5.1 Extinguishing Media:** Use any media that is suitable for the surrounding fire.

**5.2 Special Hazards Arising from the Substance or Mixture:** Thermal decomposition yields oxides of carbon and toxic chloride vapors.

**5.3 Advice for Fire-Fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

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### Section 6: Accidental Release Measures

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**6.1 Personal Precautions, Protective Equipment and Emergency Procedures:**

Wear appropriate protective clothing as needed to prevent eye and skin contact.

**6.2 Environmental Precautions:** Avoid contamination of water supplies and environmental releases. Report spills as required to authorities.

**6.3 Methods and Material for Containment and Cleaning Up:** Contain and collect spill with inert materials such as commercial absorbent, sand or earth. Place in a suitable container for disposal. If permitted, dilute and flush to sewer.

**6.4 Reference to Other Sections:**

Refer to Section 13 for disposal information and Section 8 for protective equipment.

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### Section 7: Handling and Storage

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**7.1 Precautions for Safe Handling:**

Prevent eye contact. Avoid prolonged skin contact. Remove and launder contaminated clothing before re-use. Wash thoroughly after handling and before eating, drinking, smoking or using toilet facilities.

**7.2 Conditions for Safe Storage, Including any Incompatibilities:** Store in a cool, well-ventilated area away from bases and other incompatible materials. Keep container closed.

**7.3 Specific end use(s):**

**Industrial uses:** None identified

**Professional uses:** None identified

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### Section 8: Exposure Controls / Personal Protection

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**8.1 Control Parameters:**

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| Chemical Name   | US OEL   | EU IOEL          | UK OEL           | DFG MK                     | Biological Limit Value |
|---|--|------------------|------------------|----------------------------|------------------------|
| Water   | None Established                               | None Established | None Established | None Established           | None Established       |
| C11-C15 Secondary Alcohol Ethoxylate  | None Established                               | None Established | None Established | None Established           | None Established       |
| Sodium Carbonate  | None Established                               | None Established | None Established | None Established           | None Established       |
| Tetrasodium Ethylene Diamine Tetraacetate   | None Established                               | None Established | None Established | None Established           | None Established       |
| Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides               | None Established                               | None Established | None Established | None Established           | None Established       |
| Quaternary ammonium compounds, C12-14-alkyl[(ethylphenyl)methyl]dimethyl, chlorides | None Established                               | None Established | None Established | None Established           | None Established       |
| Ethanol   | 1000 ppm STEL ACGIH TLV, 1000 ppm TWA OSHA PEL | None Established | 1000 ppm TWA     | 500 ppm TWA, 1000 ppm STEL | None Established       |
| Fragrance   | None Established                               | None Established | None Established | None Established           | None Established       |

## 8.2 Exposure Controls:

**Appropriate Engineering Controls:** General ventilation is generally adequate for normal use. Use local exhaust ventilation if needed to maintain concentration of hazardous constituents below recommended limits.

### Personal Protective Measurers

**Respiratory Protection:** Not necessary if workplace concentrations of hazardous constituents are below recommended limits. If the exposure limit is exceeded, an approved respirator should be worn. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable local or national regulations, in the US: OSHA 1910.134, ANSI Z88.2 and good Industrial Hygiene practice.

**Eye Protection:** Use chemical safety goggles.

**Skin Protection:** Impervious gloves such as neoprene or nitrile recommended where contact is likely. Wear protective clothing as required to avoid prolonged or repeated skin contact when handling.

**Other protection:** None required.

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## Section 9: Physical and Chemical Properties

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### 9.1 Information on basic Physical and Chemical Properties:

**Appearance and Odor:** Clear blue liquid with a citrus odor.

|                                 |                      |                               |   |
|---------------------------------|----------------------|-------------------------------|---|
| <b>Solubility in Water:</b>     | Soluble              | <b>Boiling Point:</b>         | Not determined                              |
| <b>Odor Threshold:</b>          | Not determined       | <b>Partition Coefficient:</b> | Not determined                              |
| <b>pH:</b>                      | 11.5 ± 0.3           | <b>Melting Point:</b>         | Not determined                              |
| <b>Specific Gravity:</b>        | 1.039 (8.66 lbs/gal) | <b>Vapor Density:</b>         | Not determined                              |
| <b>Evaporation Rate:</b>        | Not determined       | <b>Vapor Pressure:</b>        | Not determined                              |
| <b>Flammability(solid/gas):</b> | Not applicable       | <b>Flash Point:</b>           | > 200°F (>100°C) – Pensky Martin Closed Cup |
| <b>Explosive Limits:</b>        | Not determined       | <b>Autoignition</b>           | Not determined                              |

|                                   |                |                              |                |
|-----------------------------------|----------------|------------------------------|----------------|
|                                   |                | <b>Temperature:</b>          |                |
| <b>Decomposition Temperature:</b> | Not determined | <b>Viscosity:</b>            | Not determined |
| <b>Explosive Properties:</b>      | None           | <b>Oxidizing Properties:</b> | None           |

**9.2 Other Information:** None

## Section 10: Stability and Reactivity

**10.1 Reactivity:** Not reactive under normal conditions of use and storage.

**10.2 Chemical Stability:** Stable.

**10.3 Possibility of Hazardous Reactions:** Reactions with strong oxidizing agents and acids will generate heat.

**10.4 Conditions to Avoid:** None known.

**10.5 Incompatible Materials:** Avoid strong oxidizing agents and acids.

**10.6 Hazardous Decomposition Products:** Thermal decomposition yields oxides of carbon and toxic chloride vapors.

## Section 11: Toxicological Information

### 11.1 Information on Toxicological Effects:

#### Potential Health Hazards

**Inhalation:** Mists may cause mucous membrane and upper respiratory tract irritation with coughing, sore throat and difficulty in breathing.

**Skin Contact:** Causes irritation.

**Eye Contact:** Causes severe irritation or burns with redness, pain and tearing. Permanent eye damage may occur.

**Ingestion:** Swallowing may cause gastrointestinal irritation.

**Acute toxicity values:** Product ATE: Oral: 7270 mg/kg, Dermal: 17714 mg/kg, Inhalation: 23 mg/L  
 Sodium Carbonate: Oral rat LD50: 2800 mg/kg, inhalation rat LC50: 2.3 mg/L/2hr, dermal rabbit LD50 > 2000 mg/kg  
 Tetrasodium Ethylene Diamine Tetraacetate: Oral rat LD50: 1780 mg/kg  
 C11-C15 Secondary Alcohol Ethoxylate: Oral rat LD50: 412-2394 mg/kg, dermal rabbit LD50 1127-2395 mg/kg,  
 inhalation rat LD50 : 1.06 mg/L/4hr  
 Ethanol: Oral rat LD50: 10470 mg/kg, inhalation rat LC50: 116.9 mg/L

**Skin corrosion/irritation:** Studies done on product show that the product is not corrosive to skin. Product is irritating to skin according to mixture rules.

**Eye damage/ irritation:** Product is damaging to eyes.

**Respiratory Irritation:** Prolonged inhalation may cause respiratory irritation.

**Respiratory Sensitization:** Not a respiratory sensitizer.

**Skin Sensitization:** Product is not a sensitizer.

**Germ Cell Mutagenicity:** This product is not expected to present a risk of genetic damage

**Carcinogenicity:** None of the components is listed as a potential carcinogen by IARC, NTP, OSHA or the EO CLP.

**Developmental / Reproductive Toxicity:** No specific data is available. Components are not reproductive toxins.

**Specific Target Organ Toxicity (Single Exposure):** No specific data is available.

**Specific Target Organ Toxicity (Repeated Exposure):** No specific data is available. No adverse effects are expected.

## Section 12: Ecological Information

### 12.1 Toxicity:

Sodium Carbonate: Lepomis macrochirus LC50: 300 mg/L/96hr

Tetrasodium Ethylene Diamine Tetraacetate: Lepomis macrochirus LC50: 121 mg/L/96hr

C11-C15 Secondary Alcohol Ethoxylate: Pimephales promelas LC50 : 3.2-3.6mg/L/96hr, Daphnia magna EC50: 7.3 mg/L/48hr, bacteria EC50 > 1000 mg/L/16hr

Ethanol: Oral rat LD50: Pimephales promelas LC50: 14200 mg/L/96hr

**12.2 Persistence and degradability:** C11-C15 Secondary Alcohol Ethoxylate: >60% in 28 days.

**12.3 Bioaccumulative Potential:** Surfactant is not bioaccumulative.

**12.4 Mobility in Soil:** No data available.

**12.5 Results of PBT and vPvB assessment:** None required.

**12.6 Other Adverse Effects:** No data available.

## Section 13: Disposal Considerations

### 13.1 Waste Treatment Methods:

Dispose in accordance with all local, state and national regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations

## Section 14: Transport Information

|                     | 14.1 UN Number | 14.2 UN Proper Shipping Name | 14.3 Hazard Class(s) | 14.4 Packing Group | 14.5 Environmental Hazards |
|---------------------|----------------|------------------------------|----------------------|--------------------|----------------------------|
| <b>US DOT</b>       | None           | Not Regulated                | None                 | None               | No                         |
| <b>Canadian TDG</b> | None           | Not Regulated                | Not Regulated        | None               | No                         |
| <b>EU ADR/RID</b>   | None           | Not Regulated                | Not Regulated        | None               | No                         |
| <b>IMDG</b>         | None           | Not Regulated                | Not Regulated        | None               | No                         |
| <b>IATA/ICAO</b>    | None           | Not Regulated                | Not Regulated        | None               | No                         |

**14.6 Special Precautions for User:** None identified

**14.7 Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code:** Not applicable.

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**Section 15: Regulatory Information**


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**15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture****UNITED STATES REGULATIONS:**

**U.S. Sara Reporting Requirements:** The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 Of Title III Of The Superfund Amendments And Reauthorization Act.

**U.S. SARA Threshold Planning Quantity:** There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

**U.S. CERCLA Reportable Quantity (RQ):** This product is not subject to reporting requirements under CERCLA. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**U.S. TSCA Inventory Status:** The components of this product are listed on the TSCA Inventory or are exempted from listing.

**Other U.S. Federal Regulations:** None

**California Safe Drinking Water And Toxic Enforcement Act (Proposition 65):** The following ingredients are listed on the Proposition 65 Lists:

| Name            | CAS      | Amount  |
|-----------------|----------|---------|
| Benzyl Chloride | 100-44-7 | <10 ppm |

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**Section 16: Other Information**


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**NFPA RATING (NFPA 704)**      FIRE: 1              HEALTH: 3              INSTABILITY: 0

**HMIS RATING**                      FIRE: 1              HEALTH: 3              PHYSICAL HAZARD: 0

**EU and GHS Classes and Risk Phrases and Hazard Statements for Reference (See Sections 2 and 3):**

H225 Highly flammable liquid vapor  
H226 Flammable liquid vapor  
H302 Harmful if swallowed  
H312 Harmful in contact with skin  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long-lasting effects.

**Revision Date:** 6/20/15

**Supersedes Date:** 1/21/15

**Revision Summary:** Convert to REACH/GHS Format with GHS/CLP classification.

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The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. Kaivac assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Kaivac assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

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