


Material Safety Data Sheet

Section I

 kaivac cleaning systems Complete Cleaning For Healthy Results™	Kaivac Cleaning Systems 401 South Third St. Hamilton, OH 45011
Product Name: <i>KaiO Water Soluble Cleaner</i>	Emergency Telephone Number: 800-287-1136 Telephone Number for Information: 800-287-1136
	Date Prepared: 6/4/13

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Emergency Overview: Caution!

Product Description: This product is a blue liquid with a citrus odor.

Health Hazards: Prolonged contact can cause eye and skin irritation. May be harmful if swallowed.

Flammability Hazards: Non-Flammable Liquid

Reactivity Hazards: This product is not reactive.

Environmental Hazards: Release of the product not expected to cause adverse effects to the aquatic environment.

Emergency Recommendations: Emergency responders must have personal protective equipment and fire protection appropriate for the situation to which they are responding.

Health Effects or Risks From Exposure:

Acute:

Inhalation: High concentrations of mists or sprays may be irritating to the respiratory tract.

Skin: Prolonged contact may cause irritation.

Eyes: Contact may cause irritation.

Ingestion: Ingestion may result in gastrointestinal irritation with vomiting and diarrhea.

Chronic: Prolonged skin contact may cause moderate irritation. This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

HMIS: Health: 1, Fire: 0, Reactivity: 1

Section III - COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Components (CAS Number)	OSHA PEL	ACGIH TLV	Other Limits Recommended	Weight %
Hydrogen Peroxide (7722-84-1)				1-7
Cold Pressed Orange Oil (8028-48-6)				0-1

Section IV - FIRST-AID MEASURES

SKIN EXPOSURE: If this product contaminates the skin, begin decontamination with soap and water. Remove exposed or contaminated clothing, taking care not to contaminate eyes. The contaminated individual should seek medical attention if any adverse effect occurs.

EYE EXPOSURE: If this product enter the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Remove contact lenses if worn. Have contaminated individual "roll" eyes. Minimum flushing is for 15 minutes. Contaminated individual must seek medical attention if irritation develops or persists or if visual changes occur.

INHALATION: If vapors/mists generated by this product are inhaled, or breathing becomes difficult remove contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. Seek immediate medical attention. Ingestion: if this product is swallowed, call physician or poison control center for most current information. Do not induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Never induce

vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. Seek immediate medical attention.

Medical conditions aggravated by exposure: individuals with pre-existing skin conditions may be more susceptible to effects of this material.

Recommendations to physicians: treat symptoms and eliminate overexposure.

Section V - FIRE-FIGHTING MEASURES

FLASH POINT: Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

FLAMMABLE LIMITS (in air by volume, %):

Lower NA

Upper NA

FIRE EXTINGUISHING MATERIALS: Use fire extinguishing methods listed below:

Water Spray: Yes

Carbon Dioxide: Yes

Foam: Yes

Dry Chemical: Yes

Halon: Yes

Other: Any "C" Class

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No

SPECIAL FIRE-FIGHTING PROCEDURES: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

Section VI - ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Evacuate unprotected personnel from the area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in section 8. Contain and recover liquid if possible. Cover or absorb spilled liquid with sand, earth or other inert material. Clean up spill immediately and place in appropriate containers. Do not discharge to sewers and surface waters. Notify authorities if entry occurs. Remove all sources of ignition. U.S. Regulations (CERCLA) requires reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations.

Section VII - HANDLING and STORAGE

Work Practices And Hygiene Practices: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors/mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

Storage And Handling Practices: Protect against physical damage. Store in a cool, dry well-ventilated location. Keep containers tightly closed. Observe all warnings and precautions listed for the product.

Section VII - EXPOSURE CONTROLS - PERSONAL PROTECTION

Chemical Name

Hydrogen Peroxide

CAS#

7722-84-1

ACGIH TLV

Not Listed

OSHA TWA

Not Listed

Ventilation And Engineering Controls: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use a chemical fume hood or local exhaust ventilation, and process enclosure if necessary, to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132).

Respiratory Protection: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area. Contact lenses pose a special hazard; Do not wear contact lenses. If necessary, refer to U.S. OSHA 29 CFR 1910.133.

Hand Protection: Use chemically-resistant gloves when handling this product. If necessary, refer to U.S. OSHA 29 CFR 1910.138..

Body Protection: Use body protection appropriate for task (e.g. lab coat, overalls). If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

Section IX - PHYSICAL and CHEMICAL PROPERTIES

VAPOR DENSITY: No Data

% VOLATILE: No Data

SOLUBILITY IN WATER: Complete

VAPOR PRESSURE: No Data

ODOR: Citrus

APPEARANCE and COLOR: This product is a clear blue liquid.

EVAPORATION RATE (n-BuAc=1): No Data

MELTING/FREEZING POINT: No Data

BOILING POINT: 212°F

pH: Concentrate = 6-7, Diluted = 6-7

SPECIFIC GRAVITY: 1.00

Section X - STABILITY and REACTIVITY

Stability: Stable under conditions of normal storage and use.

Hazardous Decomposition Products: Thermal decomposition produces oxides of carbon.

Materials With Which Substance Is Incompatible: None known.

Possibility Of Hazardous Reactions: Will not occur.

Conditions To Avoid: None known

Section XI - TOXICOLOGICAL INFORMATION

TOXICITY DATA: CAS# 7722-84-1

ORAL (LD50): Acute: 2000 mg/kg [Mouse]. DERMAL (LD50): Acute: 4060 mg/kg [Rat]. 2000 mg/kg [pig].

VAPOR (LC50): Acute: 2000 mg/m 4 hours [Rat].

None of the components of this product are listed as a carcinogen or suspected carcinogen or is considered a reproductive hazard.

Section XII - ECOLOGICAL INFORMATION

All Work Practices Must Be Aimed At Eliminating Environmental Contamination.

Environmental Stability: This material is expected to be rapidly biodegradable. No specific data available.

Chemical Effect On Plants, Animals And Aquatic Life: No Data Available

Section XII - DISPOSAL CONSIDERATIONS

Preparing Wastes For Disposal: Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.

Section XIV - TRANSPORTATION INFORMATION

U.S. Department Of Transportation (DOT) Shipping Regulations: This product is classified (per 49 CFR 172.101) by the U.S. Department of Transportation, as follows.

Proper Shipping Name: NON-REGULATED MATERIAL

HAZARD CLASS NUMBER AND DESCRIPTION: NA

UN Identification Number: NA

Packing Group: NA

DOT Label(S) Required: None

North American Emergency Response Guidebook Number: NA

Marine Pollutant: The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA): This product is not considered as dangerous goods.

INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO): This product is not considered as dangerous goods.

Section XV - REGULATORY INFORMATION

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): None

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): Ingredients within this product are not on the Proposition 65 Lists.

Section XVI - OTHER INFORMATION

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.

END OF MSDS SHEET