

EZ Green™ HVAC Coil Cleaner

Material Safety Data Sheet | June 2012 | 5 Pages



1. Product & Company Identification

Product Name	EZ Green™ HVAC Coil Cleaner	Emergency Phone No.	1.800.255.3924 Chem-Tel (Chemical Emergencies)
Manufactured For	SimpleAir Care, LLC. P.O. Box 357 Columbus, TX 78934	Phone (For Information)	1.855.342.3742
Date Revised	06/12/2012	Prepared by	A. Jernigan

2. Hazards Identification



Irritant



Compressed Gas

Emergency Overview

Contents under pressure. Do not store where temperature exceeds 120°F/49°C. Do not puncture or incinerate container. May cause respiratory tract, eye and skin burns. Harmful if absorbed through skin or if swallowed.

Contains material which causes damage to the following organs: lungs, respiratory tract, skin, eye, lens or cornea. Causes severe irritation. May be harmful if swallowed. Avoid breathing vapor or mist. Use with adequate ventilation. Avoid contact with eyes, skin and clothes. Wash thoroughly after handling. Keep container closed.

Routes of Entry: Inhalation. Ingestion.

Potential Acute Health Effects

Eyes: Irritating to eyes.

Skin: Irritating to the skin.

Inhalation: Irritating to the respiratory system.

Ingestion: May cause burns to mouth, throat and stomach.

Carcinogenic Effects: No known significant effects or critical hazards.

Mutagenic Effects: No known significant effects or critical hazards.

Teratogenicity/Reproductive Toxicity: No known significant effects or critical hazards.

Medical Conditions: Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce damage to target organs.

Signs & Symptoms of Exposure

Inhalation: Symptoms may vary from mild to severe irritation, sneezing, sore throat or runny nose. Severe pneumonitis may occur.

Ingestion: Symptoms may include burns of the mouth and throat, stomach bleeding, vomiting, diarrhea and drop in blood pressure.

Skin Contact: Contact with skin can cause redness, irritation or severe burns and scarring with greater exposures.

Eye Contact: Contact with mist, spray or liquid causes redness, tearing, severe irritation or burning in eyes. Prolonged exposures can cause burns that may result in permanent impairment of vision, even blindness.

Chronic Exposure: Prolonged contact with dilute solutions or mists has a destructive effect upon tissue.

3. Hazardous Ingredients Information

Ingredient	CAS No.	EINECs No.	% or Range	Hazard Symbol	Risk Statement
Water	7732-18-5		>80		
Potassium Hydroxide	1310-58-3	215-181-3	1-2	C	R35
Sodium Silicate	1344-09-8	215-685-3	1-2	Xi	R34, R37
Liquefied Petroleum Gas	68476-86-8		5-10	F+ T	R12, R45/46

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4. First Aid

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: DO NOT INDUCE VOMITING! Give large quantities of water or milk, if available. Never give anything by mouth to an unconscious person. Call the nearest poison control center or the National Poison Control Hotline at 1-800-222-1222 for advice.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician immediately. Wash clothing before reuse.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

Note to Physician: *Perform endoscopy in all cases of suspected potassium hydroxide ingestion. In cases of severe esophageal corrosion, the use of therapeutic doses of steroids should be considered. General supportive measures with continual monitoring of gas exchange, acid-base balance, electrolytes and fluid intake are also required.*

5. Fire Fighting Measures

Fire Extinguishing Media: Foam, CO₂, dry chemical or other media suitable for the primary source of the fire.

Hazardous Combustion Products: Carbon monoxide. Carbon dioxide.

Unusual Fire & Explosion Hazards: WARNING! Contents under pressure may explode from excessive heat. Exposure to temperature above 120°F/49°C may cause bursting.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved, self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

6. Spill/Accidental Release Measures

Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Do not flush caustic residues to the sewer. Residues from spills can be diluted with water or neutralize with dilute acid such as acetic, hydrochloric or sulfuric. Absorb neutralized caustic residue on clay, vermiculite or other inert substance and package in a suitable container for disposal. U.S. Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of 2,500 gallons. The toll free number for the U.S. Coast Guard National Response Center is 1-800-424-8802. Remove contaminated clothing immediately. Remove unnecessary personnel from the area of the spill.

7. Handling & Storage

Protect from physical damage. Store in a cool, dry, ventilated area below 120°F/49°C. Keep this and all chemicals out of the reach of children. Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limit (PEL): 2ppm (potassium hydroxide)

ACGIH Threshold Limit Value (TLV): 2ppm (potassium hydroxide)

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation: A Manual of Recommended Practices, most recent edition for details.

Personal Respirators (NIOSH Approved): If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to 10 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full facepiece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full facepiece positive pressure, air-supplied respirator.

WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities or a source of running water in the work area.

Work Hygienic Practices: Use proper industrial hygiene practices to minimize hazardous exposure. Wash hands after handling this material, and before eating or smoking.

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9. Physical/Chemical Characteristics

Appearance: Clear, slightly yellow liquid (bulk product)

Odor: Odorless

Odor Threshold: N/A

pH: 12-13

Melting Point/Freezing Point: < 32°F (0°C)

Initial Boiling Point & Boiling Range: >220°F (104°C)

Flash Point: N/A

Evaporation Rate (water=1): ~1

Flammability Limits %: N/A

Vapor Pressure: @20°C

*N/A = Data not available

Vapor Density: 0.62

Relative Density: 1.05

Solubility: 100% soluble in water

Partition Coefficient: n-octanol/water: N/A

Auto-ignition Temperature: N/A

Decomposition Temperature: N/A

Viscosity: N/A

Explosive Properties: N/A

Oxidizing Properties: N/A

10. Stability & Reactivity Data

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Reaction with non-ferrous metals releases flammable and explosive hydrogen gas.

Hazardous Polymerization: Will not occur.

Incompatibilities: This mixture contains potassium hydroxide. Do not allow product to dry on aluminum, magnesium, tin or zinc surfaces. Do not mix this product with acids organic halogen compounds, especially trichloroethylene.

Conditions to Avoid: Heat and incompatibles listed above.

11. Toxicology Information

Potassium Hydroxide: 365 mg/kg oral-rat LD50. The severity of the tissue damage is a function of its concentration, the length of tissue contact time and local tissue conditions. After exposure, there may be a time delay before irritation and other effects occur. This material is a strong irritant and is corrosive to the skin, eyes and mucous membranes. This material may cause severe burns and permanent damage to any tissue with which it comes into contact.

Inhalation: Will cause severe irritation, possible burns with pulmonary edema, which may lead to pneumonitis.

Skin Contact: May cause severe irritation and corrosion of tissue.

Eye Contact: Can cause severe irritation and corrosion with possible corneal damage and blindness.

Ingestion: May cause irritation, corrosion/ulceration, nausea and vomiting. In general, chronic effects are due to long-term irritation.

This material may cause dermatitis on the skin, or recurrent corneal ulceration and visual disturbances of vision. In rare cases, reports have noted long-term inhalation causes bronchial inflammatory reaction or obstructive airway dysfunction.

12. Ecological Information

Ingredient

Potassium hydroxide, CAS#1310-58-3

Environmental Fate: No information found.

Environmental Toxicity: TLm: 80 ppm/Mosquito fish/24 hr./Fresh water

Sodium silicate, CAS# 1344-09-8

The following data is reported for sodium silicates on a 100% solids basis:

96-hour median tolerance for fish (*Gambusia affinis*) of 2320 ppm.

96-hour median tolerance for water fleas (*Daphnia magna*) of 247 ppm.

96-hour median tolerance for snail eggs (*Lymnaea*) of 632 ppm.

96-hour median tolerance for Amphipoda of 160 ppm.

Fate & Transport: Sodium silicate is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to aquatic life. It does not contribute to BOD. Sodium silicate does not bioaccumulate except in species that use silica as a structural material such as diatoms and siliceous sponges. Where abnormally low natural silica concentrations exist (less than 0.1 ppm), dissolved silica may be a limiting nutrient for diatoms and a few other aquatic algal species. However, the addition of excess dissolved silica over the limiting concentration will not stimulate the growth of diatom populations; their growth rate is independent of silica concentration once the limiting concentration is exceeded.

Biodegradation: Sodium silicate is inorganic and not subject to biodegradation.

Persistence: Diluted material rapidly depolymerizes to yield dissolved silica in a form that is indistinguishable from natural dissolved silica.

Bioconcentration: Neither silica or sodium will appreciably bioconcentrate up the food chain.

Other Ecological Information: Sodium silicate has exhibited slight toxicity to terrestrial organisms.

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13. Disposal Considerations

Dispose of spill clean-up and other wastes in accordance with federal, state and local regulations. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Treat empty containers as hazardous. Dispose of container and unused contents in accordance with federal, state and local requirements. State and local disposal regulations may differ from federal disposal regulations.

14. Transportation Information

U.S. DOT

Consumer Commodity, ORM-D

International (Water, I.M.O.)

Proper Shipping Name: Aerosols (max. 1 L) (Limited Quantity)

Hazard Class: 2.1

UN: 1950

Marine Pollutant: No

15. Regulatory Information



Irritant



Compressed Gas

Risk Phrases

R12: Extremely flammable

R34: Causes burns

R35: Causes severe burns

R37: Irritating to respiratory system

R45: May cause cancer

R46: May cause heritable genetic damage

Federal, State & International Regulations

U.S. REGULATIONS

U.S. Inventory (TSCA): All components are listed on or are exempt from the inventory.

TSCA 12(b) Export Notification: Not listed.

CERCLA Sections 102a/103 Hazardous Substances: 1000 lbs. RQ (potassium hydroxide)

SARA Title III Section 302 Extremely Hazardous Substances: Not regulated.

SARA Title III SARA Sections 311/312 Hazardous Categories:

Acute: Yes **Chronic:** No **Fire:** No **Reactive:** No **Sudden Release of Pressure:** No

SARA Title III Section 313: Not regulated.

OSHA Process Safety: Not regulated.

STATE REGULATIONS

California Proposition 65: Not regulated.

New Jersey Worker and Community Right to Know:

Reporting Requirement: Potassium hydroxide (1310-58-3) 1-2%

Right To Know Hazardous Substance List: Potassium hydroxide (1310-58-3) 1-2%

Special Health Hazard Substance List: Potassium hydroxide (1310-58-3) 1-2%

Pennsylvania Right to Know:

Reporting Requirement: Potassium hydroxide (1310-58-3) 1-2%

Hazardous Substance List: Potassium hydroxide (1310-58-3) 1-2%

ENVIRONMENTAL HAZARDOUS SUBSTANCE LIST: Potassium hydroxide (1310-58-3) 1-2%

SPECIAL HAZARDOUS SUBSTANCE LIST: Not regulated.

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15. Regulatory Information (continued)

CANADIAN REGULATIONS

WHMIS Classification: E.

Canada Inventory (DSL/NDSL): All components of this product are listed on the DSL.

Australian Hazchem Code: 2R

Poison Schedule: Not scheduled.

WHMIS: This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA/HMIS Ratings: Health: 2

Flammability: 1

Reactivity: 0

Label Hazard Warning

CAUTION: Keep out of reach of children. Contents under pressure. Do not store where temperature exceeds 120°F/49°C. Do not puncture or incinerate container.



Label Precautions

Avoid contact with eyes and skin.

Wear gloves, safety glasses and protective clothing when applying EZ Green™ solutions.

Do not take internally.

Keep out of reach of children.

Consult the MSDS for additional storage and handling information.

Label First Aid

For accidental eye contact, flush with water and get medical attention. For skin contact, flush with cool water for 15 minutes, or until the area no longer feels slick. Apply skin lotion as necessary to reduce dryness and irritation.

This information is, to the best of our knowledge and belief, accurate and reliable as of the date completed. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the completeness and suitability of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer any warranty against patent infringement.