Safety Data Sheet

(pursuant to 29 CFR §1910.1200(g) and Appendix D)

Section 1: Product Identification

Product Name: Lime Off Acid Detergent **Recommended Use:** Lime and scale removal
ECS Envirokleen
Daytime Telephone: (317) 352-1941 **Emergency Telephone (24 hour):** (800) 535-5053

Section 2: Hazard Identification



Hazard Class: Corrosive Mixture **Signal Word:** Danger
Hazard Category(ies): Eye Damage/Irritation – Category 1; Skin Corrosion/Irritation – 1A
Hazard Statement(s): May cause serious eye damage; may cuses severe skin burns and eye damage

Precautionary Statements:
Prevention: Do not breathe dust or mists. Wash hand thoroughly after handling. Recommended to wear protective rubber gloves and chemical splash goggles or face shield when using this product when cleaning over-head surfaces. If inhalable particles of dusts or mists may occur during use, wear NIOSH approved respiratory protection. Mix ONLY with water.
Response: If swallowed: Rinse out mouth. Do NOT induce vomiting. Immediately call a Poison Control Center or doctor for treatment advice. **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 Control Center or doctor for treatment advice. **If on skin (or hair)**: Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing and shoes before reuse. Call a Poison Control Center or doctor for treatment advice if irritation persists. **If inhaled**: Remove person to fresh air and keep comfortable for breathing. Immediately call a Poison Control Center or doctor for treatment advice..
Storage: Store locked up **Disposal:** See Section 13 for disposal information **Hazards Not Otherwise Classified:** None identified

Section 3: Composition/Information on Ingredients

Product Type: Mixture

Hazardous Ingredient Name (common name(s))	CAS Number	Concentration Range (%)
Phosphoric Acid	7664-38-2	30>65

Section 4: First-Aid Measures

If swallowed: Rinse out mouth. Do NOT induce vomiting. Immediately call a Poison Control Center or doctor for treatment advice.
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 Control Center or doctor for treatment advice.
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Call a Poison Control Center or doctor for treatment advice if irritation persists.
If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a Poison Control Center or doctor for treatment advice.
Symptoms of Exposure: See Section 11 for additional information.

Indication of Immediate Medical Attention and Special Treatment Needed: Treat exposure symptomatically. In all cases of eye contact, ingestion, or inhalation, contact a doctor or Poison Control Center immediately.

Section 5: Fire-Fighting Measures

Suitable Fire Extinguishing Media: Use water spray, fog or foam. **Specific Hazards:** None known
Decomposition Byproducts: Carbon dioxide, carbon monoxide and/or metal oxides.
Special Protective Equipment: Self-contained breathing apparatus.
Specific Precautions: Remove all persons from the vicinity. No responsive action should be taken without proper training.

Section 6: Accidental Release Measures

Personal Precautions: Initiate spill containment procedures immediately using containment or absorbtion methods. Keep people away from area. Put on appropriate protective equipment (see Section 8).
Spill Cleanup: Do not allow spilled material to enter sewers, waterways or soil. Neutralize with water. Mop, sweep or otherwise collect spilled material and hold for disposal. Consult local government authorities for allowable disposal methods. After removal, rinse area completely with water to remove residue.

Section 7: Handling and Storage

Handling Precautions: Avoid contact with eyes, skin or clothing. Avoid inhalation of dust or mists. Use in a well ventilated area. Wash thoroughly after handling.
Storage Precautions: Store in a locked location inaccessible to small children. Keep container closed when not in use. Store in a well ventilated area between 60-100°F (15- 38°C).

Section 8: Exposure Controls/Personal Protection

Hazardous Ingredient Name (common name)	OSHA PEL	ACGIH TLV
Phosphoric Acid	1 mg/m^3 (8 hour TWA)	1 mg/m^3 (ceiling)

Engineering Controls: Use with adequate ventilation to maintain exposure limits below listed thresholds.
Personal Protective Equipment: The following protective equipment is recommended during usage:
Eye protection: Wear chemical splash goggles or face shield when using this product. **Skin protection:** Wear protective rubber gloves, a long sleeve shirt and, if necessary, a rubber apron to prevent contact. **Respiratory protection:** Wear a NIOSH approved respirator for corrosive dusts or mists.
Hygienic Measures: Wash hand thoroughly after handling. Avoid contact with clothing or shoes. Wash contaminated items before reuse. Avoid wearing contact lenses when using this product.

Section 9: Physical and Chemical Properties

Physical State: Lime Green Liquid **Odor:** Characteristic **pH (1% solution):** <2.0 **Melt Point:** NA **Freeze Point:** No data available
Boiling Point: NA **Flash Point:** Non-Combustible **Evaporation Rate (H_2O = 1.0):** <1.0
Flammability: NA

Explosion Limits: NA **Vapor Pressure:** No data available **Vapor Density (Air =1.0):** >1.0
Relative Density: >1.0
Solubility (in 120°F Water): 100% **Viscosity (H_2O =1.0):** >1.0 **Partition coefficient: n-octanol/water:** No data available
Auto Ignition Temperature: No data available **Decomposition Temperature:** No data available

Section 10: Stability and Reactivity

Stability: Product is stable under normal storage and usage conditions.
Reactivity: Product is highly reactive with alkalis. Reactions may produce hazardous conditions, including violent splattering of corrosive materials. Product is reactive with halogens (such as chlorine) and may release chlorine gas if mixed with these materials. NEVER mix this product with other chemicals. Mix this product ONLY with water.
Incompatibilities: Alkalis, halogens, metals.
Hazardous Decomposition Byproducts: None are expected under normal storage and usage conditions.

Section 11: Toxicological Information

Likely Routes of Exposure: Eyes, Skin, Ingestion, Inhalation
Symptoms: Eye contact: Irritation, pain, redness, watering. **Skin contact:** Irritation, pain, redness, blistering. **Inhalation:** Coughing, choking, respiratory tract irritation, breathing difficulty. **Ingestion:** Pain in mouth, throat, stomach.
Acute Effects of Exposure: Irritation or burns to eyes, skin, mouth, throat, stomach and respiratory tract.
Toxicity Data: Phosphoric Acid: Oral (LD50) 1,530 mg/kg (rat)
Chronic Effects of Exposure: No known significant effects or critical hazards. **Carcinogen Listing Source:** NA

Section 12: Ecological Information

Ecotoxicity: No specific data available for this mixture. Phosphoric Acid is known to be toxic to aquatic life.
Persistence and Degradability: No data **Bioaccumulative Potential:** No data **Mobility in Soil:** No data
Other Adverse Effects: No known significant effects or critical hazards.

Section 13: Disposal Considerations

Avoid disposal of this product. Use complete contents according to directions. Do not release contents into a municipal sewer except through normal dilution and usage. Do not release contents onto the ground or into any body of water. Dispose of empty container by offering for recycling if available, or into a landfill. Follow all applicable state and local regulations.

Section 14: Transport Information

DOT Proper Shipping Name: NA 1760, Compounds, Cleaning Liquid, 8, PG III (Contains Phosphoric Acid)
Note: Certain package sizes of this product may qualify for exceptions to DOT's packaging, labeling and other requirements, and thus may have different DOT shipping names. For bulk shipments, see the shipping documents.

Section 15: Regulatory Information

Regulation	Listing
TSCA §8(b) Inventory	All Ingredients Listed

SARA Title III §301-303 Extremely Hazardous Substances None
SARA Title III §304 Reportable Quantity (RQ) Release Notification Chemicals
Phosphoric Acid
SARA Title III §311-312 Right-To-Know Hazardous Chemicals
Phosphoric Acid
SARA Title III §311-312 Right-To-Know Extremely Hazardous Substances None
SARA Title III §313 Form R Reportable Chemicals None

Section 16: Other Information

Date of Last Revision: May 1, 2015

The information herein is believed to be correct, but is given without warranty or guaranty of any kind, express or implied. The hazards provided in this Safety Data Sheet apply to the product in its concentrated form, and may differ significantly after dilution. Dilution of concentrate may mitigate thresh hold limit.