SAFETY DATA SHEET

Date Issued: 03/26/2014

SDS No: LIM

Lime Off

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Lime Off

GENERAL USE: Hard water scale remover

PRODUCT DESCRIPTION: Non Foaming Descaler

PRODUCT CODE: LIM

CHEMICAL FAMILY: Acid Detergent Blend

MANUFACTURER

MISCO Products Corporation

1048 Stinson Drive Reading, PA 19605

Emergency Phone: 610-926-4106 **Customer Service:** 800-548-4568 **Transportation:** 800-548-4568

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TEL (Medical and Transportation): 800-255-3924 POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1B Serious Eye Damage, Category 1

GHS LABEL



Corrosion

SIGNAL WORD: DANGER HAZARD STATEMENTS

H318: Causes serious eye damage.

H314: Causes severe skin burns and eye damage.

H290: May be corrosive to metals. **PRECAUTIONARY STATEMENT(S)**

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P260: Do not breathe fumes, gas, mist, vapors or spray.

P264: Wash hands thoroughly after handling.

P234: Keep only in original packaging.

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P363: Wash contaminated clothing before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310: Immediately call a POISON CENTER or doctor/physician.

P390: Absorb spillage to prevent material damage.

Storage:

P405: Store locked up.

P406: Store in a corrosion resistant plastic container or a metal container with a resistant inner liner.

Disposal:

P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Pink Liquid

IMMEDIATE CONCERNS: Causes irreversible eye damage and skin burns.

POTENTIAL HEALTH EFFECTS

EYES: Corrosive to the eyes and may cause severe damage including blindness.

SKIN: Contact causes severe skin irritation and possible burns.

SKIN ABSORPTION: None Expected. INGESTION: Harmful if swallowed.

INHALATION: Mist is irritating to nose, throat and lungs.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards. **TERATOGENIC EFFECTS:** No known significant effects or critical hazards.

CARCINOGENICITY: No known significant effects or critical hazards. **MUTAGENICITY:** No known significant effects or critical hazards.

ROUTES OF ENTRY: Eye, skin, ingestion.

TARGET ORGAN STATEMENT: No known significant effects or critical hazards.

CANCER STATEMENT: None

SENSITIZATION: No known significant effects or critical hazards.

WARNING CAUTION LABELS: Corrosive

3. COMPOSITION / INFORMATION ON INGREDIENTS

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Chemical Name		CAS
Phosphoric Acid	40 - 45	7664-38-2
C8-C10 ethoxylated, propoxylated alcohols	0 - 1	68603-25-8
Dye	< 0.1	TS
Water	50 - 60	7732-18-5

COMMENTS: If CAS number is "TS", the specific chemical identity has been withheld as a trade secret. If CAS number is "TS", the specific chemical identity has been withheld as a trade secret.

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Remove contaminated clothing. Immediately flush with water followed by washing with mild soap. Seek medical attention.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Severe burning sensation, damage marked by burns.

SKIN: Burning sensation, redness.

INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing. **ACUTE EFFECTS:** Corrosive to eyes. Causes moderate to severe skin irritation. Harmful if swallowed.

CHRONIC EFFECTS: Not Established

NOTES TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: None

GENERAL HAZARD: Non-flammable

EXTINGUISHING MEDIA: No special requirements. **FIRE FIGHTING EQUIPMENT:** No special requirements.

HAZARDOUS DECOMPOSITION PRODUCTS: Not Established

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid runoff into storm sewers and ditches which lead to waterways.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil.

AIR SPILL: NA = Not Applicable

GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-

combustible material and transfer to containers.

SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.

HANDLING: Avoid contact with skin and eyes. Wash hands before eating, drinking, smoking or using toilet facilities.

STORAGE: Store in closed container in an area inaccessible to children.

STORAGE TEMPERATURE: Store at ambient temperatures. **STORAGE PRESSURE:** Store at ambient atmospheric pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

EXT COURT GOIDELINES				
	OSHA HAZARDOUS	COMPONENTS (29 CI	FR1910.1200)	
	EXPOSURE LIMITS			
Chemical Name	Type ppm mg/m³			
Phosphoric Acid	OSHA PEL	TWA		1
	ACCULTIV	TWA		1
	ACGIH TLV	STEL		3
	Supplier OEL	TWA	NL	NL
		STEL	NL	NL

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash googles and full face-shield.

SKIN: Rubber or other chemical resistant gloves.

RESPIRATORY: A respirator is not needed under normal and intended conditions of product use.

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid ODOR: Characteristic.

ODOR THRESHOLD: Not Established

COLOR: Pink **pH:** 0.5 to 1.0

PERCENT VOLATILE: >60

FLASH POINT AND METHOD: None

FLAMMABLE LIMITS: N/A

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: Not Available

VAPOR DENSITY: 1 Air = 1 BOILING POINT: 212° F; 100° C FREEZING POINT: 32° F; 0° C MELTING POINT: Not Available

THERMAL DECOMPOSITION: Not Available

SOLUBILITY IN WATER: Complete **EVAPORATION RATE:** (Water =1) 1.0

DENSITY: 10.39

SPECIFIC GRAVITY: ~ 1.245 grams/ml.

VISCOSITY: Slightly viscous.

(VOC): None

10. STABILITY AND REACTIVITY

REACTIVITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition

products should not be produced.

INCOMPATIBLE MATERIALS: Strong alkalis, oxidizers, chlorine Bleach

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)
Phosphoric Acid	~ 1530 mg/kg (rat)	~ 2740 mg/kg (rabbit)
C8-C10 ethoxylated, propoxylated alcohols	447 to 847 mg/kg (rat)	~ 4000 mg/kg (rabbit)

DERMAL LD₅₀: Not Established **ORAL LD**₅₀: Not Established **INHALATION LC**₅₀: Not Established

GERM CELL MUTAGENICITY: No known significant effects or critical hazards.

CARCINOGENICITY

IARC: No listed substance

REPRODUCTIVE TOXICITY: No known significant effects or critical hazards. **STOT-SINGLE EXPOSURE:** No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: Not Established

AQUATIC TOXICITY (ACUTE) 96-HOUR LC₅₀: Not Established **Notes:** Practically nontoxic

CHEMICAL FATE INFORMATION: Not yet Determined

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. If discarded, this material and its containers should be treated as hazardous waste based on the characteristics of corrosivity as defined under federal RCRA regulations (40 CFR 261). Consult local authorities for disposal into public sewer.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Small quantities (less than 1 gallon) of used material may be flushed to sanitary sewer with copious amounts of water. Larger quantities must be disposed of by a licensed disposal company.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

RCRA/EPA WASTE INFORMATION: Corrosive

RCRA HAZARD CLASS: C

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Compound, Cleaning Liquid

TECHNICAL NAME: Phosphoric Acid Solution PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: 1760 PACKING GROUP: III PLACARDS: Corrosive

LABEL: Certain package sizes determine the proper labeling of containers. Consult manufacturer for specific information

regarding proper labeling.

OTHER SHIPPING INFORMATION: Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

SPECIAL SHIPPING NOTES: Quantities less than or equal to one (1) gallon = Limited Quantity not regulated.

VESSEL (IMO/IMDG)

SHIPPING NAME: Corrosive liquid, acidic, inorganic, n.o.s.

TECHNICAL NAME: Phosphoric Acid Solution

UN/NA NUMBER: 3264

PRIMARY HAZARD CLASS/DIVISION: 8

PACKING GROUP: III
PLACARDS: Corrosive
LABEL: Corrosive

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION





SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HEALTH HAZARDS: Health - Acute

313 REPORTABLE INGREDIENTS: No listed substance

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: No listed substance

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Phosphoric Acid

Chemical Name	Wt.%	CERCLA RQ
Phosphoric Acid	40 - 45	5,000 lbs.

CERCLA RQ: 5000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements		
Phosphoric Acid	Massachusetts Right to Know Substance New Jersey Right To Know Substance New York Right to Know Substance Pennsylvania Right to Know Substance Rhode Island Right to Know Substance		

CALIFORNIA PROPOSITION 65: No listed substance

CARCINOGEN: No listed substance

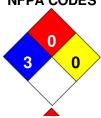
16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department Date Prepared: 03/26/2014

HMIS RATING

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	D

NFPA CODES



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