SAFETY DATA SHEET

9/28/16

Texas Correctional Industries
Texas Department of Criminal Justice

Lime SoL Lime Deposit Remover

Date Issued: May 2015

Supersedes: September 2013

SECTION 1 - IDENTIFICATION

Product Name: **Lime - Sol**
General Use: Lime Deposit Remover
Manufacturer Name: Texas Correctional Industries
Roach Soap & Detergent Plant
15845 FM 164
Childress, TX 79201

Emergency Telephone Numbers
Galveston Texas Poison Control: **1-800-764-7661**
Roach Soap & Detergent Plant Lab: 940-937-6364 EXT. 7392
SDS available at: www.tci.tdcj.texas.gov
Monday thru Thursday: 5:30 AM – 3:30 PM

SECTION 2 - HAZARD IDENTIFICATION

Primary Route of Exposure : Eyes, Skin, Oral or Inhalation
Signs and Symptoms of Over Exposure (acute)

- Eyes : **CAUTION:** very corrosive; may cause irreversible eye damage. Do not exposure or allow contact with your eyes.
- Skin : Can cause epidermal burns, redness, and rash.
- Ingestion : May cause gastrointestinal irritation or burns to the mouth and throat. Serious action necessary- Seek medical help immediately.
- Inhalation : May cause irritation to the respiratory tract, and cause tissue damage or lung injury. Do not breathe vapors or any gases released from reactions with other compounds.

Signs and Symptoms of Over Exposure (chronic) : Eye and skin irritation; itching or burning.
Medical condition aggravated by over exposure : Not known
Carcinogen or suspect of carcinogen ingredients : None

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Chemical/Common Name	CAS No.	PERCENT	ACGIH/OSHA (TWA) TLV	PEL	WHMIS
Hydroxyacetic acid	79-14-1	4 - 7	N/D	N/D	1%
Phosphoric acid*	7664-38-2	41 - 43	1 mg/m^3	N/D	1%

N/A= Not Applicable N/D = Not Determined

*Listed SARA Title III Section 313; 29 CFR 1910.1000 Subpart Z
WHMIS – minimum amount necessary in a mixture to trigger reporting: 1% (hazardous chemical); 0.1% (extremely hazardous chemical)

SECTION 4 - FIRST AID MEASURES

Eyes : Flush with plenty of water for at least 15 min. Seek medical attention immediately. Contains corrosive acids.
Skin : Flush with a large amount of water for 15 – 20 minutes. Wash skin area with soap and water if any residual

persists. Remove contaminated clothing and seek medical attention.
Ingestion : Rinse mouth thoroughly. Drink plenty of water. Do not induce vomiting unless directed by physician.
Inhalation : Move person to fresh air. Give artificial resuscitation (CPR) if person is not breathing.

SECTION 5 - FIRE FIGHTING MEASURES

Flammable Limit	:	N/A
Physical Hazard	:	Corrosive
Extinguishing Media	:	Water, Foam, Dry Chemicals, or Carbon Dioxide
Fire Extinguishing Procedure	:	Use of respiratory equipment is recommended in enclosed areas
Fire and Explosive Hazard	:	None

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Steps to be taken if released or spilled : Collect and contain all materials practical for salvage or disposal. Rinse residue with copious amounts of water.

SECTION 7 - HANDLING AND STORAGE

Store in a cool, dry ventilated area. **IMPORTANT!** Product use is not recommended until this Material Safety Data Sheet has been read and understood by the end user.

Note: Product should be used as directed on the label. No warranty is implied expressly or otherwise regarding the accuracy of the information in the product's suitability for the consumer's use and the outcome of its use. The technical accuracy of the information submitted herein is based on the data submitted to TCI by the manufacturers for the materials used in this finished product.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection	:	None required with normal use
Ventilation Requirement	:	Local exhaust. Maintain adequate ventilation
Protective Gloves	:	Yes. Rubber or neoprene
Eye Protection	:	Use chemical goggles; Avoid splashing this liquid

Do not allow eating, drinking, or smoking in the work area during its use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity (water = 1)	:	1.020
Solubility in Water	:	Complete
pH	:	< 2.0
Boiling Point	:	> 200° F
Appearance and Odor	:	Clear light green or brown liquid mild odor

SECTION 10 - STABILITY AND REACTIVITY

Hazardous Decomposition	:	Oxides of carbon, nitrogen, and sulfur; release of water, heat, and toxic gases are possible.
Stability	:	Stable
Incompatibility	:	Strong bases, nitrogen-containing compounds such as ammonia, urea, amines; also chlorinated chemicals, bleaches, or any oxidizing agents.

NOTE: The C### notation below refers to a principal component based on the amount present in the product which may involve trade secret chemicals. In the event of an accident, notify the Poison Control Center for more information.

SECTION 11 – TOXICOLOGICAL INFORMATION

C038

Acute Effects:

Inhalation:	Inhalation of mists can cause corrosive action on mucous membranes. Symptoms include burning, choking, coughing, wheezing, laryngitis, shortness of breath, headache or nausea. Move casualty to fresh air and keep at rest. Get medical attention if symptoms persist.
Eyes:	Symptoms include eye burns, watering eyes. Rinse with plenty of water for a minimum of 15 minutes and seek medical attention immediately.
Skin:	Symptoms include burning, itching, redness, inflammation and/or swelling of exposed tissues. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention if necessary.
Ingestion:	Do Not Induce Vomiting! Causes corrosive burns of the mouth, gullet and gastrointestinal tract if swallowed. Symptoms include burning, choking, nausea, vomiting and severe pain. Wash outmouth with water and give a glass of water or milk. Get medical attention immediately.
Target organs:	Blood, liver, skin, eyes and bone marrow.

Acute Toxicity Data:

Phosphoric acid	LD50 [oral, rat]; 1530 mg/kg LC50 [rabbit]; 1.689 mg/L (1 hour) LD50 Dermal (rabbit); 2740 mg/kg
Chronic Effects:	May affect liver, conjunctivitis, dermatitis, pulmonary edema.
Teratogenicity:	Negative
Mutagenicity:	Negative
Embryotoxicity:	Negative
Synergistic Products/Effects:	Not Available

c027

Oral LD50 :	2,040 mg/kg (70% solution), rat
Inhalation 4 h LC50 :	3.6 mg/l , male, rat
Corrosive, Skin irritation :	rabbit
Eye irritation : Corrosive,	rabbit
Did not cause sensitization on laboratory animals., Skin sensitization	guinea pig
	Repeated dose toxicity : Oral rat: Weight loss Inhalation : rat Liver effects
Mutagenicity:	Did not cause genetic damage in cultured animals. Did not cause genetic damage in cultured mammalian cells. Did not cause genetic damage in cultured bacterial cells. : Reproductive toxicity: Animal testing showed no reproductive toxicity.

Teratogenicity :	Several developmental toxicity studies have been conducted with ethylene glycol (metabolized to glycolic acid) or with glycolic acid in mammals. The majority of studies conducted with rodents demonstrate developmental toxicity only at high dietary exposure levels which also produce other toxic effects in the adult animal. Based on the weight of evidence, glycolic acid is not considered a unique developmental hazard to the embryo.
c062 Mutagenicity	not mutagenic in AMES Test.

SECTION 12 – ECOLOGICAL INFORMATION

C038

Ecotoxicity (aquatic and terrestrial):	DL50 12 hours@ pH of 3 – 3.5 DL50 (12 hours): pH 4.6 (Daphnia Magna)
Persistence and Degradability:	Not Available
Bioaccumulative Potential:	Not Available
Mobility in Soil:	Not Available
Other Adverse Effects:	Not Available

C027

96 h LC50 :	Pimephales promelas (fathead minnow) 164 mg/l
72 h EbC50 :	Pseudokirchneriella subcapitata (green algae) 22.5 mg/l
48 h EC50 :	Daphnia magna (Water flea) 141 mg/l
Environmental Fate : Glycolic acid :	
Biodegradability :	Readily biodegradable, according to appropriate OECD test.
Bioaccumulation :	Bioaccumulation is unlikely.

C062

Product:	
Sodium Xylene Sulfonate SXS	Test Results EC50 Algae: > 230 mg/kg E050 Daphnia: > 1000 mg/L L050 Rainbow Trout: > 1000 mg/L

* Estimates for product may be based on additional component data not shown.

Ecotoxicity	Readily biodegradable.

SECTION 13 – DISPOSAL CONSIDERATIONS

C038

RCRA:	
Hazardous waste?	Yes RCRA ID number: DOO2
Waste Residues:	Carefully dilute with water, neutralize per spill procedures in section 6. Neutralized material may be flushed to sewer (REGULATIONS PERMITTING!) or disposed of through a licensed contractor. Users should review their operations in terms of the applicable federal/nation or local regulations and consult with appropriate regulatory agencies before discharging or disposing of waste material.
Product containers:	Containers, if thoroughly cleaned, preferably by rinsing three times and handling the rinse water as waste residues, may be disposed of or recycled as non-hazardous waste. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies before discharging or disposing of waste material.

C027

Waste Disposal :	Treatment, storage, transportation, and disposal must be in accordance with

applicable federal, state/provincial, and local regulations. May be a RCRA hazardous waste due to the corrosivity characteristic (pH).

Environmental Hazards :

Do not re-use empty containers.

C062

Dispose in accordance with all applicable regulations. All wastes must be handled in accordance with local, state and federal regulations.

SECTION 14 – TRANSPORT INFORMATION

C038

DOT:	UN1805, Phosphoric Acid solution, 8, pg III
TDG:	UN1805, Phosphoric Acid liquid, 8, pg III
PIN:	Not Available
IDMG:	UN1805, 8, pg III
Marine Pollutant:	No
IATA/ICAO:	UN1805, 8, pg III
RID/ADR:	Class 8, Item 17(c), corrosive, UN1805

C027

DOT UN number :	3265
Proper shipping name :	Corrosive liquid, acidic, organic, n.o.s. Class : 8 Packing group : II Labeling No. : 8 IATA_C UN number : 3265
Proper shipping name :	Corrosive liquid, acidic, organic, n.o.s. Class : 8 Packing group :II Labeling No. : 8 IMDG UN number : 3265
Proper shipping name :	Corrosive liquid, acidic, organic, n.o.s. Class : 8 Packing group :II Labeling No. : 8

C062

Refer to bill of lading ox container label for DOT or other transportation hazard classification, if any.

SECTION 15 – REGULATORY INFORMATION

C038

TSCA Inventory Status:	All ingredients are listed on the TSCA inventory.
Federal and State Regulations:	
Illinois toxic substances disclosure to employee act:	Phosphoric acid
Illinois chemical safety act:	Phosphoric acid
New York release reporting list:	Phosphoric acid
Rhode Island RTK hazardous substances:	Phosphoric acid
Pennsylvania RTK:	Phosphoric acid
Minnesota:	Phosphoric acid
Massachusetts RTK:	Phosphoric acid
Massachusetts spill list:	Phosphoric acid
New Jersey:	Phosphoric acid

New Jersey spill list:	Phosphoric acid
Louisiana spill reporting:	Phosphoric acid
California Director's list of hazardous substances:	Phosphoric acid
SARA 302/304/311/312 extremely hazardous substances:	Phosphoric Acid
SARA 313 toxic chemical notification and release reporting:	Phosphoric Acid
CERCLA: Hazardous Substances:	Phosphoric Acid, 5000lbs.
California Proposition 65: No	
WHMIS Canada:	Class E - corrosive liquid.
DSCL (EEC):	R34 – Causes burns.
C027	
TSCA Status :	Listed.
SARA 313 Regulated :	SARA 313: This material does not contain any chemical components with Chemical(s) known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
Title III : classification	Acute Health Hazard: Yes Chronic Health Hazard: No Fire: No Reactivity/Physical hazard: No Pressure: No
C062	
There is no calculable reportable quantity (RQ) for this product.	
CERCLA (Superfund) reportable quantity	None
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
Section 302 extremely substance	No hazardous
Section 311 hazardous	No chemical

SECTION 16 – OTHER INFORMATION

Federal Hazardous Substances Act statutes and Consumer Product Safety Commission regulations: 16 CFR 1500.14(b)(3) and 1500.83(a)(13).

*SDS updated by: Timothy Sharpe, TCI Chemist, Childress, TX

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