

# Safety Data Sheet

Lime Solv

## SECTION I - IDENTIFICATION

**PRODUCT NAME:** Lime Solv  
**PRODUCT CODE:** 2200  
**PRODUCT USE:** Lime and Scale Remover  
**COMPANY NAME:** Beta Technology, Inc.  
**COMPANY ADDRESS:** P.O Box 218686, Houston, TX 77218  
**COMPANY PHONE:** 281-647-9700  
**EMERGENCY PHONE:** 800-535-5053

## SECTION II – HAZARDS IDENTIFICATION

**CLASSIFICATION:** Skin Corrosive: Category 1B  
Eye Damage: Category 1  
Specific Target Organ Toxicity (Single Exposure): Category 3  
Corrosive to Metals

**HAZARD STATEMENT(S): DANGER:** Causes severe skin burns and eye damage. May cause respiratory irritation. May be corrosive to metals.

This product contains the following percentage of chemicals of unknown toxicity: 0%

**PRECAUTIONARY STATEMENTS:** Avoid breathing fumes, mist, or vapors. Wash hands thoroughly after handling. Wear protective gloves, protective clothing, face shield, and eye protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center or doctor if you feel unwell. Store locked up. Dispose of contents and container in accordance with local, state, and national regulations. Keep only in original container. Absorb spillage to prevent material damage. Store in a corrosive resistant container with a resistant inner liner. Use only outdoors or in a well-ventilated area. Store in a well-ventilated place. Keep container tightly closed.

**SYMBOL:**



**HAZARDS NOT OTHERWISE CLASSIFIED:** N/A

## SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Hydrogen Chloride	7647-01-0	20-40%

## SECTION IV - FIRST AID MEASURES

**EYES:** If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

**INGESTION:** If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting.

**INHALATION:** If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

**SKIN:** If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

**ACUTE HEALTH HAZARDS:** Causes severe burns.

**CHRONIC HEALTH HAZARDS:** Dermatitis may occur due to long-term irritation. May cause respiratory irritation.

**NOTE TO PHYSICIAN:** There is no specific treatment regimen. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

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## SECTION V – FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use appropriate media for surrounding fire.

**UNSUITABLE EXTINGUISHING MEDIA:** N/A

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear NIOSH approved Self Contained Breathing Apparatus with a full face piece operated in a positive pressure demand mode with full body protective clothing when fighting fires.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Toxic fumes may be generated during a fire.

**HAZARDOUS COMBUSTION PRODUCTS:** May react with some metals to generate hydrogen gas which can be explosive in air.

## SECTION VI – ACCIDENTAL RELEASE MEASURES

**PERSONAL PROTECTIVE EQUIPMENT:** Refer to section VIII for proper Personal Protective Equipment.

**SPILL:** Clean up using cloth or absorbent material. Dispose of product-containing wiping cloth or absorbent paper in suitable manner. Place waste in proper containers for waste disposal.

**WASTE DISPOSAL:** Dispose of in accordance with federal, state, and local regulations. Do not reuse container and recycle or place in trash collection. Drums and pails should be offered for recycling.

**RCRA STATUS:** Waste likely considered hazardous under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

## SECTION VII – HANDLING AND STORAGE

**HANDLING AND STORAGE:** Store in a cool, dry area, keep containers tightly closed and dry. Keep out of reach of children and do not store near food, drink, or animal food. Store locked up.

**OTHER PRECAUTIONS:**

**INCOMPATIBILITY:** Alkaline Materials.

## SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Hydrogen Chloride	5 ppm	2 ppm

**ENGINEERING CONTROLS / VENTILATION:** General ventilation recommended.

**RESPIRATORY PROTECTION:** Wear NIOSH/MSHA approved respiratory protection if used in confined, poorly ventilated areas.

**PERSONAL PROTECTIVE EQUIPMENT:** Safety glasses, Face Shield, Gloves, and Synthetic apron.

**ADDITIONAL MEASURES:** Wash hands and any contaminated clothing immediately after handling. Do not get on clothes or skin.

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Light amber liquid

**ODOR:** Acid odor

**ODOR THRESHOLD:** N/D

**BOILING POINT:** N/D

**FREEZING POINT:** < 32°F (0°C)

**FLAMMABILITY:** Not considered a flammable liquid by OSHA (29CFR 1910.1200)

**FLASH POINT:** N/D

**AUTOIGNITION TEMPERATURE:** N/D

**LOWER FLAMMABILITY LIMIT:** N/D

**UPPER FLAMMABILITY LIMIT:** N/D

**VAPOR PRESSURE (mm Hg):** >18

**VAPOR DENSITY (AIR=1):** 1

**EVAPORATION RATE:** < 0.8 (Slow)

**SPECIFIC GRAVITY (H2O=1):** 1.1 @ 77° F (25° C)

**pH:** <1

**SOLUBILITY IN WATER:** 100%

**PARTITION COEFFICIENT: n-OCTANOL/WATER (K<sub>ow</sub>):** N/D

**VOLATILE ORGANIC COMPOUNDS (VOC):** 0%

**DECOMPOSITION TEMPERATURE:** N/D

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VISCOSITY: N/D

## SECTION X – STABILITY AND REACTIVITY DATA

**REACTIVITY:** Chemically active metals and bases.

**CHEMICAL STABILITY:** Stable

**CONDITIONS TO AVOID:** Chlorine liberating material. Do not mix with bases, ammonia or other cleaning compounds.

**INCOMPATIBILITY:** Alkaline Materials.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCT:** Hydrogen Chloride gas, and Phosgene.

**POSSIBLE HAZARDOUS REACTIONS:** None Known

## SECTION XI – TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION:** Hydrogen Chloride (7647-01-0) LC<sub>50</sub> (Inhalation, Rat, 1hr) 2810 ppm.

**ROUTES OF ENTRY:** Eyes, Ingestion, Inhalation, Skin

**EYES:** Causes burns.

**INGESTION:** Causes chemical burns, damage to mouth and esophagus with gastrointestinal irritation, nausea, vomiting.

**INHALATION:** Hydrochloric acid is extremely corrosive and irritating to the respiratory tract

**SKIN:** Cause redness, pain, and severe burns to skin. Concentrated solutions cause deep ulcers and discolor skin. Exposure to liquid, vapor, or mist causes severe skin irritation.

**MEDICAL CONDITION AGGRAVATED:** Pre-existing disorders of skin and lungs.

**ACUTE HEALTH HAZARDS:** Causes severe burns.

**CHRONIC HEALTH HAZARDS:** Dermatitis may occur due to long-term irritation. May cause respiratory irritation.

**CARCINOGENICITY:** OSHA: No ACGIH: No NTP: No IARC: No OTHER: No

## SECTION XII – ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION:** Hydrogen Chloride (7647-01-0): Fish: Mosquitofish: 282 mg/l 96hr

**BIODEGRADABILITY:** This product is biodegradable.

**BIOACCUMULATION:** This product is not expected to bioaccumulate.

**SOIL MOBILITY:** This product is mobile in soil.

**OTHER ECOLOGICAL HAZARDS:** None Known

## SECTION XIII – DISPOSAL CONSIDERATIONS

**WASTE DISPOSAL:** Dispose of in accordance with federal, state, and local regulations. Do not reuse container and recycle or place in trash collection. Drums and pails should be offered for recycling.

**RCRA STATUS:** Waste likely considered hazardous under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

## SECTION XIV - TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** Corrosive Liquid, Acidic, Inorganic, N.O.S., (Containing Hydrochloric Acid)

**HAZARD CLASS/DIVISION:** 8

**UN/NA NUMBER:** UN 3264

**PACKAGING GROUP:** III

### AIR SHIPMENT

**PROPER SHIPPING NAME:** Corrosive Liquid, Acidic, Inorganic, N.O.S., (Containing Hydrochloric Acid)

**HAZARD CLASS/DIVISION:** 8

**UN/NA NUMBER:** UN 3264

**PACKAGING GROUP:** III

### SHIPPING BY WATER:

#### VESSEL (IMO/IMDG)

**PROPER SHIPPING NAME:** Corrosive Liquid, Acidic, Inorganic, N.O.S., (Containing Hydrochloric Acid)

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**PACKAGING GROUP:** III  
**ENVIRONMENTAL HAZARDS WATER:** N/A

## SECTION XV - REGULATORY INFORMATION

**TSCA STATUS:** All Chemicals are listed or exempt.

**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** Hydrogen Chloride (7647-01-0)

Reportable Quantity = 5,000 lbs

**SARA 311/312 HAZARD CATEGORIES:** Acute Health

**SARA 313 REPORTABLE INGREDIENTS:** Hydrogen Chloride (7647-01-0)

**STATE REGULATIONS:** California Proposition 65: None

**INTERNATIONAL REGULATIONS:** All components are listed or exempted.

**NFPA HEALTH:** 3

**HMIS HEALTH:** 3

**NFPA FLAMMABILITY:** 0

**HMIS FLAMMABILITY:** 0

**NFPA REACTIVITY:** 1

**HMIS REACTIVITY:** 1

**NFPA OTHER:** None

**HMIS PROTECTION:** D

## SECTION XVI - ADDITIONAL INFORMATION

**PREPARATION BY:** Chioma Agbai

**DATE PREPARED:** 12/02/2013

**REVISION DATE:** 06/16/2017

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

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