

# Safety Data Sheet

## SECTION I - IDENTIFICATION

**PRODUCT NAME:** PRECISE  
**PRODUCT CODE:** 1070  
**PRODUCT USE:** Acidic Cleaner  
**COMPANY NAME:** BETA TECHNOLOGY, INC  
**COMPANY ADDRESS:** PO Box 218686 Houston, TX 77218  
**COMPANY PHONE:** 281-647-9700  
**EMERGENCY PHONE:** 800-535-5053

## SECTION II – HAZARDS IDENTIFICATION

**CLASSIFICATION:** Skin Corrosive: Category 1B  
Skin 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 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	7-13%
Phosphoric Acid	7664-38-2	10-30%

## 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.

**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. Immediately call a poison center or doctor.

**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:** Possible liver, kidney, and blood damage; May cause dermatitis and discoloration of teeth as a result due to long term exposure.

**NOTE TO PHYSICIAN:** The absence of visible signs or symptoms of burns does not reliably exclude the presence of actual tissue damage.

## SECTION V – FIRE-FIGHTING MEASURES

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

**UNSUITABLE EXTINGUISHING MEDIA:** N/A

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**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. Avoid contact with skin and breathing smoke, fumes, and decomposition products. Cool fire exposed containers with water fog to prevent bursting.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** This product contains a large amount of water and will not burn under normal fire conditions. Contents corrosive. May react with metal to release highly flammable hydrogen gas.

**HAZARDOUS COMBUSTION PRODUCTS:** Hydrogen chloride, Chlorine, Hydrogen gas

## SECTION VI – ACCIDENTAL RELEASE MEASURES

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

**SPILL:** Wear recommended protective equipment. Dike spilled material. Recover as much spilled product as possible and collect in acid-resistant container. Neutralize with alkaline material (soda ash, lime), then use absorbent inert material and place in chemical waste container. Prevent from entering sewers, water sources or low lying areas. Ventilate area well before re-entry.

**WASTE DISPOSAL:** Dispose of in accordance with federal, state, and local regulations.

**RCRA STATUS:** Waste likely considered Hazardous Waste D002 (Corrosive waste) due to the pH of the solution and the corrosive characteristic.

## SECTION VII – HANDLING AND STORAGE

**HANDLING AND STORAGE:** Loosen closure carefully. Minimize temperature extremes. Store in cool, dry, ventilated area with acid resistant floors and good drainage. Protect from physical damage. Keep out of direct sunlight and away from heat and incompatible materials. Keep containers closed when not in use. Do not wash out container and use for other purposes. When diluting, always add the acid to water; never water to acid. Protect from freezing. Do not store in metal containers.

**OTHER PRECAUTIONS:** Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warning and precautions listed for the product. Keep out of the reach of children

**INCOMPATIBILITY:** Strong oxidizers, metals, alkalis. Do not mix with any products

## SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Hydrogen Chloride	5 ppm	2 ppm
Phosphoric Acid	1 mg/m <sup>3</sup>	1 mg/m <sup>3</sup>

**ENGINEERING CONTROLS / VENTILATION:** General ventilation should be used. Provide sufficient mechanical ventilation (general and/or local exhaust) to maintain exposure below the recommended exposure limits.

**RESPIRATORY PROTECTION:** Not required under normal conditions of use. If product is sprayed or used in a confined area a NIOSH / MSHA approved respirator may be advised in absence of proper environmental control. See 29 CFR 1910.134 or your safety equipment supplier.

**PERSONAL PROTECTIVE EQUIPMENT:** Chemical resistant rubber, acid resistant gloves. Safety glasses should be worn during use.

**ADDITIONAL MEASURES:** Avoid contact with skin or eyes and avoid breathing vapors. Wash hands after use.

## SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Viscious Dark Blue Liquid

**ODOR:** Acidic Wintergreen 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 @ 77°F (25°C)

**VAPOR DENSITY (AIR=1):** > 2

**EVAPORATION RATE:** N/D

**SPECIFIC GRAVITY (H2O=1):** 1.15 @ 77°F (25°C)

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**pH:** <1  
**SOLIDS (%)**: N/A  
**SOLUBILITY IN WATER:** 100%  
**PARTITION COEFFICIENT: n-OCTANOL/WATER (Kow):** N/D  
**VOLATILITY INCLUDING WATER (%):** 98%  
**VOLATILE ORGANIC COMPOUNDS (VOC):** 1%  
**DIELECTRIC STRENGTH (Volts):** N/A  
**DECOMPOSITION TEMPERATURE:** N/D  
**VISCOSITY:** N/D

## SECTION X – STABILITY AND REACTIVITY DATA

**REACTIVITY:** Chemically active metals and bases.  
**CHEMICAL STABILITY:** Stable  
**CONDITIONS TO AVOID:** Avoid incompatibles. Reacts with metals to liberate hydrogen gas. Extremes of hot and cold.  
**INCOMPATIBILITY:** Strong oxidizers, metals, alkalis. Do not mix with any products  
**HAZARDOUS DECOMPOSITION OR BY-PRODUCT:** Oxides of carbon, Chlorine, hydrogen chloride, hydrogen gas  
**POSSIBLE HAZARDOUS REACTIONS:** Cast iron, certain steel alloys, strong bases

## SECTION XI – TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION: Hydrogen Chloride** (Mix:7647-01-0 & 7732-18-5) LD<sub>50</sub> (Oral, Rat) 700 mg/kg; LD<sub>50</sub> (Dermal, Rabbit) 5010 mg/kg; LC<sub>50</sub> (Inhalation, Rat, 1hr) 3124ppm.  
**ROUTES OF ENTRY:** Inhalation, ingestion, skin absorption, skin and/or eye contact.  
**EYES:** Vapors, liquid, or mist are irritating and causes stinging, tearing, redness, swelling, severe burns and can result in corneal damage and blindness. Burning may not be immediately painful or visible.  
**INGESTION:** Corrosive and toxic! May cause gastrointestinal irritation, burns. Ingestion holds a serious risk of poisoning. May be harmful or fatal if swallowed. Causes sever gastrointestinal irritation, diarrhea, nausea, vomiting, abdominal pain, vomiting of blood, and burns to the mouth, throat, and digestive tract.  
**INHALATION:** Inhalation of vapors can cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract, headache, dizziness, nausea, and difficulty breathing. Prolonged or repeated exposure especially when sprayed may cause irreversible respiratory tract damage and/or may be fatal.  
**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:** Possible liver, kidney, and blood damage; May cause dermatitis and discoloration of teeth as a result due to long term exposure.  
**CARCINOGENICITY:** OSHA: No ACGIH: No NTP: No IARC: 3 - Not classifiable OTHER: N/A

## SECTION XII – ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION: Hydrogen Chloride** (7647-01-0): Fish: Bluegill/Sunfish: 3.6mg/L 48hr  
**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.  
**RCRA STATUS:** Waste likely considered Hazardous Waste D002 (Corrosive waste) due to the pH of the solution and the corrosive characteristic.

## SECTION XIV - TRANSPORTATION INFORMATION

**PROPER SHIPPING NAME:** Corrosive Liquid, Acidic, Inorganic, N.O.S., (Hydrochloric Acid & Phosphoric Acid)  
**HAZARD CLASS/DIVISION:** 8

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**UN/NA NUMBER:** UN 3264  
**PACKAGING GROUP:** II

## AIR SHIPMENT

**PROPER SHIPPING NAME:** Corrosive Liquid, Acidic, Inorganic, N.O.S., (Hydrochloric Acid & Phosphoric Acid)  
**HAZARD CLASS/DIVISION:** 8  
**UN/NA NUMBER:** UN 3264  
**PACKAGING GROUP:** II

## SHIPPING BY WATER:

**VESSEL (IMO/IMDG)**  
**PROPER SHIPPING NAME:** Corrosive Liquid, Acidic, Inorganic, N.O.S., (Hydrochloric Acid & Phosphoric Acid)  
**HAZARD CLASS/DIVISION:** 8  
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**PACKAGING GROUP:** II  
**ENVIRONMENTAL HAZARDS WATER:** N/A

## SECTION XV - REGULATORY INFORMATION

**TSCA STATUS:** All Chemicals are listed or exempt.  
**CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT):** None  
**SARA 311/312 HAZARD CATEGORIES:** Hydrogen chloride - Acute health hazard, reactive hazard  
**SARA 313 REPORTABLE INGREDIENTS:** 2-Butoxyethanol (111-76-2)  
**STATE REGULATIONS:** California Proposition 65: None  
**INTERNATIONAL REGULATIONS:** Canadian Domestic Substance list (DSL/NDSL) – Hydrogen Chloride listed.  
**NFPA HEALTH:** 3 **HMIS HEALTH:** 3  
**NFPA FLAMMABILITY:** 0 **HMIS FLAMMABILITY:** 0  
**NFPA REACTIVITY:** 1 **HMIS REACTIVITY:** 1  
**NFPA OTHER:** None **HMIS PROTECTION:** B

## SECTION XVI - ADDITIONAL INFORMATION

**PREPARATION BY:** Jonathon Jarvis  
**DATE PREPARED:** 10/24/2013  
**REVISION DATE:** 11/13/2014

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

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