SECTION I - IDENTIFICATION

PRODUCT NAME: Beta Brite
PRODUCT CODE: 6360
PRODUCT USE: Aluminum brightener
COMPANY NAME: Beta Technology, Inc.
COMPANY ADDRESS: PO Box 218686 Houston, TX 77218
COMPANY PHONE: 281-647-9700
EMERGENCY PHONE: 800-255-3924

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION:
Acute Toxicity (Oral / Inhalation / Dermal): Category 3
Carcinogenicity: Category 1A
Skin Corrosive: Category 1B
Eye Damage: Category 1
Specific Target Organ Toxicity (Repeated Exposure): Category 1
Corrosive to Metals

HAZARD STATEMENT(S): DANGER:
Toxic if swallowed, in contact with skin, and if inhaled. 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:
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves, protective clothing, eye protection, and face shield. Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Do not breathe fumes, mist, vapors, or spray. Use only outdoors or in a well-ventilated area. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Rinse skin with water or shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Keep container tightly closed. Store in a well-ventilated place 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.

SYMBOL:

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENT</th>
<th>CAS NUMBER</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Fluoride</td>
<td>7664-39-3</td>
<td>5-10%</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>7664-93-9</td>
<td>3-7%</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>111-76-2</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

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:** Possible liver, Kidney, blood damage, dental or skeletal fluorosis

**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:** Dry chemical, carbon dioxide, foam, and water fog.

**UNSUITEABLE 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 locked up. Store in a corrosive resistant container with a resistant inner liner. Keep containers tightly closed. Do not store near food, drink, or animal food. Gloves, face shield, and protective clothing to cover exposed skin recommended during use. Do not eat, drink or smoke when using this product.

**OTHER PRECAUTIONS:** Keep out of the reach of children.

**INCOMPATIBILITY:** Strong bases and metals

### SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENT</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen Fluoride</td>
<td>2 mg/m3</td>
<td>5 mg/m3</td>
</tr>
<tr>
<td>Sulfuric Acid</td>
<td>0.2 mg/m3</td>
<td>0.2 mg/m3</td>
</tr>
<tr>
<td>2-Butoxyethanol</td>
<td>20 ppm</td>
<td>50 ppm</td>
</tr>
</tbody>
</table>

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

**RESPIRATORY PROTECTION:** Wear NIOSH/MSHA approved organic vapor respiratory protection if listed exposure limits (section VIII) are exceeded.

**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:** Blue 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):** N/D
VAPOR DENSITY (AIR=1): 1
EVAPORATION RATE: N/D
SPECIFIC GRAVITY (H2O=1): 1.1 @ 77° F (25° C)
pH: <1
SOLUBILITY IN WATER: 100%
PARTITION COEFFICIENT: n-OCTANOL/WATER (K OW): N/D
VOLATILE ORGANIC COMPOUNDS (VOC): 0%
DECOMPOSITION TEMPERATURE: N/D
VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY DATA

REACTIVITY: Chemically active metals and acids
CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: Chlorine liberating material. Do not mix with bases, ammonia or other cleaning compounds.
INCOMPATIBILITY: Strong bases and metals
HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Oxides of Carbon, Fluorine, and Sulfur.
POSSIBLE HAZARDOUS REACTIONS: None Known

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Sulfuric Acid (7664-93-9) LD50 (Oral, Rat) 2296 mg/kg; LC50 (Inhalation, Rat, 1hr) 372 mg/l
Hydrofluoric Acid (7664-39-3) LC50 (Inhalation, Rat, 1hr) 1278 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: 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 burns.
MEDICAL CONDITION AGGRAVATED: May aggravate pre-existing medical conditions.
ACUTE HEALTH HAZARDS: Causes severe burns.
CHRONIC HEALTH HAZARDS: Possible liver, Kidney, blood damage, dental or skeletal fluorosis
OTHER: CA Prop 65

SECTION XII – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Sulfuric Acid (7664-93-9) LC50 (Fish, 96h) 45.0644 mg/l
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. (Hydrofluoric Acid and Sulfuric Acid)
HAZARD CLASS/DIVISION: 8
UN/NA NUMBER: UN 3264
PACKAGING GROUP: II

AIR SHIPMENT
PROPER SHIPPING NAME: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Hydrofluoric Acid and Sulfuric 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. (Hydrofluoric Acid and Sulfuric Acid)
HAZARD CLASS/DIVISION: 8
UN/NA NUMBER: UN 3264
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): Hydrofluoric Acid (7664-39-3)
Reportable Quantity = 100 lbs  Sulfuric Acid (7664-93-9) - Reportable Quantity = 1,000 lbs
SARA 311/312 HAZARD CATEGORIES: Acute Health, Chronic Health.
SARA 313 REPORTABLE INGREDIENTS: Hydrofluoric Acid - 7664-39-3; Sulfuric Acid-7664-93-9
STATE REGULATIONS: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Sulfuric Acid (7664-93-9): California Prop 65 (Carcinogenic substance), RTK - MA, NJ, PA, RI.
Hydrofluoric Acid (7664-39-3) RTK: MA, NJ, PA, RI
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: 01/24/2017

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

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