SECTION I - IDENTIFICATION

PRODUCT NAME: BETA CLEAN

PRODUCT CODE: 2020

PRODUCT USE: Cleaner, Alkaline

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 1C

Eye Damage: Category 1 Corrosive to Metals

HAZARD STATEMENT(S): DANGER: Causes Severe skin burns and eye damage. May be corrosive to metals.

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

PRECAUTIONARY STATEMENTS: Do not breathe mists. Wash hands thoroughly after handling. Wear protective gloves, protective clothing, 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. 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.

SYMBOL:

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Sodium Hydroxide	1310-73-2	1-5%
2-Butoxyethanol	111-76-2	5-10%
Sodium Metasilicate	6834-92-0	1-5%

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. If eye irritation persists: Get medical advice or attention.

INGESTION: If swallowed: Rinse mouth. Do NOT induce vomiting. Get medical advice or attention.

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: Sodium hydroxide may produce inflammation of the eyes, skin, and mucous membranes.

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, alcohol foam, and water spray.

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: Non-combustible. Water spray may be used to keep fire exposed containers cool. **HAZARDOUS COMBUSTION PRODUCTS:** None known. Product is not combustible.

SECTION VI – ACCIDENTAL RELEASE MEASURES

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

SPILL: Dike area to contain spill. Dilute spill with large quantities of water and then neutralize with a dilute acid. flush area with water until clean. wear ppe equipment:safety goggles, chemical resistant clothing, and gloves

WASTE DISPOSAL: Dispose of in accordance with federal, state, and local regulations. Best method is to recycle or reuse for intended purpose. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before discarding in trash.

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: 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: Containers of this material may be hazardous when empty since they retain product residues.

INCOMPATIBILITY: Strong acids

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Sodium Hydroxide	2 mg/m3	2 mg/m3
2-Butoxyethanol	50 ppm	20 ppm
Sodium Metasilicate	Not Established	Not Established

ENGINEERING CONTROLS / VENTILATION: General ventilation and local exhaust should be adequate.

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

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses, gloves, and synthetic apron.

ADDITIONAL MEASURES: Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear to Hazy Red Liquid

ODOR: Butyl odor

ODOR THRESHOLD: N/D **BOILING POINT:** N/D **FREEZING POINT:** 32°F

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): 17.5 @ 77°F (25°C) **VAPOR DENSITY (AIR=1):** > 1 @ 77°F (25°C)

EVAPORATION RATE: < 1

SPECIFIC GRAVITY (H2O=1): 1.10 @ 77° F (25° C)

pH: 13-14

SOLIDS (%): 12-15%

SOLUBILITY IN WATER: 100%

PARTITION COEFFICIENT: n-OCTANOL/WATER (Kow): N/D

VOLATILITY INCLUDING WATER (%): 87% VOLATILE ORGANIC COMPOUNDS (VOC): 7%

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DIELECTRIC STRENGTH (Volts): N/A **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: Extremes of hot and cold.

INCOMPATIBILITY: Strong acids

HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Carbon monoxide and unidentified organic compounds may be formed

during combustion.

POSSIBLE HAZARDOUS REACTIONS: Will not occur

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Sodium Hydroxide (1310-73-2) LD₅₀ (Oral, Rabbit) 400 mg/kg **2-Butoxyethanol** (111-76-2)

LD₅₀ (Oral, Rat) 470 mg/kg; LC₅₀ (Inhalation, Rat, 4hr) 450 ppm; LD₅₀ (Dermal, Rabbit) 220 mg/kg

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin

EYES: May cause burning, irritation, redness, tearing, pain, mild corneal damage

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

INHALATION: Acute exposure may cause nausea, vomiting, coughing and pulmonary irritation.

SKIN: Causes severe burns. prolonged contact will destroy tissue.

MEDICAL CONDITION AGGRAVATED: Pre-existing disorders of the skin, respiratory system, and eyes will be aggravated by over

exposure.

ACUTE HEALTH HAZARDS: Causes severe burns.

CHRONIC HEALTH HAZARDS: Sodium hydroxide may produce inflammation of the eyes, skin, and mucous membranes.

CARCINOGENICITY: OSHA: No ACGIH: No NTP: No IARC: No OTHER: N/A

SECTION XII – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Sodium Hydroxide (1310-73-2) LC₅₀ (Bluegill Sunfish, 48hr) 99 mg/L; (Mosquito Fish 96hr) 125 mg/L; (Brown Shrimp, 48hr) 30-100 mg/L; (Brook Trout, 24hr) 25 ppm **Sodium Metasilicate** (6834-92-0) LC₅₀ (gambusia affnis, 96hr) 2328 ppm; (daphnia magna, 96hr) 247 ppm; (amphipoda, 96hr) 168 ppm **2-Butoxyethanol** (111-76-2) Toxic to aquatic life only in high concentrations, lethal concentrations not available.

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. Best method is to recycle or reuse for intended purpose. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before discarding in trash.

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, Basic, Inorganic, n.o.s.

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 3266
PACKAGING GROUP: III

AIR SHIPMENT

PROPER SHIPPING NAME: Corrosive Liquid, Basic, Inorganic, n.o.s.

HAZARD CLASS/DIVISION: 8

Safety Data Sheet

UN/NA NUMBER: UN 3266

SHIPPING BY WATER: VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Corrosive Liquid, Basic, Inorganic, n.o.s.

HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN 3266

ENVIRONMENTAL HAZARDS WATER: N/A

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All Chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Sodium Hydroxide (1310-73-2)

Reportable Quantity = 1,000 lbs

SARA 311/312 HAZARD CATEGORIES: 2-Butoxyethanol (111-76-2) Acute health hazard

SARA 313 REPORTABLE INGREDIENTS: None

CLEAN WATER ACT: None

STATE REGULATIONS: 2-Butoxyethanol (111-76-2) Right-to-Know acts for New Jersey, Massachusetts, Pennsylvania, Rhode

Island, Illinois, Florida, Minnesota; Massachusetts spill list

INTERNATIONAL REGULATIONS: 2-Butoxyethanol (111-76-2) Europe (EINECS), Japan (ENCS), Australia (AICS), WHMIS

(Canada), DSCL (EEC), NDSL, Korea (ECL), Philippines (PICCS), New Zealand (NZIOC), China (IECS).

NFPA HEALTH: 2
NFPA FLAMMABILITY: 0
HMIS FLAMMABILITY: 0
NFPA REACTIVITY: 0
HMIS REACTIVITY: 0
NFPA OTHER: N/A
HMIS PROTECTION: C

SECTION XVI - ADDTIONAL INFORMATION

PREPARATION BY: Jonathon Jarvis **DATE PREPARED:** 11/25/2013 **REVISION DATE:** 10/21/2014

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

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