SECTION I - IDENTIFICATION

PRODUCT NAME: BETA PEN PRODUCT CODE: 2550-A PRODUCT USE: Lubricant 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: Dissolved Gas Skin Irritant: Category 2 Eye Irritant: Category 2A Specific Target Organ Toxicity (Single Exposure): Category 3 Specific Target Organ Toxicity (Repeated Exposure): Category 1 Carcinogenicity: Category 1B Germ Cell Mutagenicity: Category 2 Aspiration Hazard: Category 1

HAZARD STATEMENT(S): DANGER: Contains gas under pressure; May explode if heated. Causes skin and serious eye irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. May cause cancer. Suspected of causing genetic defects. May be fatal if swallowed and enters airways.

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

PRECAUTIONARY STATEMENTS: Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Store in a well-ventilated place. Wash hands thoroughly after handling. Wear protective gloves, eye protection, and protective clothing. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. 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 attention. If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting. Dispose of contents and container in accordance with local, state, and national regulations. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: Get medical attention. Avoid breathing fumes, mist, vapors, and spray. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.

SYMBOL:



HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Carbon Dioxide	124-38-9	1-5%
Trichloroethylene	79-01-6	35-45%
Tetrachloroethylene	127-18-4	35-45%
Mineral Spirits	8052-41-3	1-5%

SECTION IV - FIRST AID MEASURES

EYES: Remove contact lenses. Flush with water for at least 15 minutes. See a physician if irritation persists. **INGESTION:** Rinse mouth with water. Do not induce vomiting unless directed by medical authority. Seek medical attention.

Safety Data Sheet

INHALATION: Move to fresh air. If breathing is difficult, administer oxygen. Seek immediate medical attention.

SKIN: Immediately wash with soap and water for 15 minutes. Remove contaminated clothing and shoes immediately. Seek medical attention if irritation persists.

ACUTE HEALTH HAZARDS: Eyes: redness, tearing, blurred vision

Skin: defatting and dermatitis

Inhalation: Anesthetic, irritation, Central Nervous System depression

Oral: abdominal irritation, nausea, vomiting, and diarrhea. Aspiration risk.

CHRONIC HEALTH HAZARDS: Possible cancer causing agent and overexposure may also include damage to skin, kidneys, liver, lungs, blood, reproductive or central nervous systems. May cause dizziness, headache, nausea, mental confusion, or visual disturbances.

NOTE TO PHYSICIAN: Do not administer adrenaline or epinephrine to a victim of chlorinated solvent poisoning. This product contains ingredients that may be anticipated to be a carcinogen.

SECTION V – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, foam, or Carbon Dioxide (CO₂).

UNSUITABLE EXTINGUISHING MEDIA: Water spray/stream.

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. Use water spray only to cool exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Contents under pressure. Exposure to temperatures above 120°F may cause bursting.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of carbon, chlorine, hydrogen chloride and phosgene.

SECTION VI – ACCIDENTAL RELEASE MEASURES

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

SPILL: Use absorbent on spill, sweep to clean. Dispose in accordance with local, state and federal laws. Small releases may be wiped up with wiping material.

WASTE DISPOSAL: Dispose of in accordance with federal, state, and local regulations. Do not dump in sewers. Wrap container and place in trash collection, do not puncture, incinerate, or reuse container.

RCRA STATUS: Waste solvent likely considered U228 (Trichloroethylene), hazardous, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION VII – HANDLING AND STORAGE

HANDLING AND STORAGE: Pressurized container: Do not pierce or burn, even after use. Protect from sunlight. Store in a well ventilated place. Do not expose to temperatures exceeding 50°C/122°F.

OTHER PRECAUTIONS: Keep out of the reach of children.

INCOMPATIBILITY: Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Carbon Dioxide	5000 ppm	5000 ppm
Trichloroethylene	100 ppm	10 ppm
Tetrachloroethylene	100 ppm	25 ppm
Mineral Spirits	500 ppm	100 ppm

ENGINEERING CONTROLS / VENTILATION: Material is heavier than air. Material may concentrate in low lying areas. Normal, forced ventilation required to meet TLV requirements. Local exhaust ventilation is generally preferred.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved organic vapor 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.

Safety Data Sheet

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, Brown Aerosol Spray **ODOR:** Chlorinated solvent odor **ODOR THRESHOLD: N/D BOILING POINT:** >188°F (87°C) FREEZING POINT: N/D FLAMMABILITY: Not considered a flammable aerosol or an extremely flammable aerosol 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): 59 **VAPOR DENSITY** (AIR=1): > 2**EVAPORATION RATE:** > 3 (Fast) **SPECIFIC GRAVITY (H2O=1):** 1.365 @ 77°F (25°C) **pH:** N/A SOLUBILITY IN WATER: 0% PARTITION COEFFICIENT: n-OCTANOL/WATER (Kow): N/D **VOLATILE ORGANIC COMPOUNDS (VOC): 41.3% DECOMPOSITION TEMPERATURE:** >400°C VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY DATA

REACTIVITY: Chemically active metals and bases.

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: Temperatures greater than 122°F may cause bursting.

INCOMPATIBILITY: Strong acids, strong alkalis, strong oxidizing agents, chemically active metals, such as aluminum, barium, lithium, sodium, magnesium, potassium, titanium, beryllium, concentrated nitric acid some plastics, rubbers, and coatings.
HAZARDOUS DECOMPOSITION OR BY-PRODUCT: Oxides of carbon, chlorine, hydrogen chloride and phosgene.

POSSIBLE HAZARDOUS REACTIONS: None Known

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: Tetrachloroethylene (127-18-4) LD₅₀ (Oral, Rat) 2629 mg/kg; LC₅₀ (Inhalation, Mouse, 6hr) 4100 ppm **Trichloroethylene** (79-01-6) LD₅₀ (Oral, Rat) 4920 mg/kg; LD50 (Dermal, Rabbit) > 20000 mg/kg; LC50

(Inhalation, Mouse, 4hr) 8450 ppm

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin

EYES: Causes severe irritation, redness, tearing, pain, visual disturbance, may cause eye damage.

INGESTION: Causes gastrointestinal irritation, headaches, nausea, diarrhea, vomitting, abdominal cramps.

INHALATION: Irritation to respiratory tract, dizziness, headache, nausea, depression of central nervous system, prolonged exposure may cause unconsciousness, heart effects, liver effects, kidney effects, and death.

- **SKIN:** Irritation likely, redness and pain. May cause localized defatting, blistering with prolonged skin contact. May be absorbed through the skin.
- **MEDICAL CONDITION AGGRAVATED:** Excessive exposure will aggravate pre-existing disorders of eyes, skin, respiratory, liver, kidney, cardiovascular system, pulmonary illnesses, or central nervous system.

ACUTE HEALTH HAZARDS: Eyes: redness, tearing, blurred vision

Skin: defatting and dermatitis

Inhalation: Anesthetic, irritation, Central Nervous System depression

Oral: abdominal irritation, nausea, vomiting, and diarrhea. Aspiration risk.

CHRONIC HEALTH HAZARDS: Possible cancer causing agent and overexposure may also include damage to skin, kidneys, liver, lungs, blood, reproductive or central nervous systems. May cause dizziness, headache, nausea, mental confusion, or visual disturbances.

CARCINOGENICITY: OSHA: Yes ACGIH: A2 - Suspected NTP: 2 - Anticipated

IARC: 2A - Probable OTHER: CA Prop 65

SECTION XII – ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: Not Established BIODEGRADABILITY: Component or components of this product are not biodegradable. BIOACCUMULATION: Components in this mixture can bioaccumulate in aquatic organisms. SOIL MOBILITY: This product is mobile in soil. OTHER ECOLOGICAL HAZARDS: This material is toxic to aquatic life.

SECTION XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with federal, state, and local regulations. Do not dump in sewers. Wrap container and place in trash collection, do not puncture, incinerate, or reuse container.

RCRA STATUS: Waste solvent likely considered U228 (Trichloroethylene), hazardous, under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION XIV - TRANSPORTATION INFORMATION

PROPER SHIPPING NAME:Aerosols, Ltd. Qty.HAZARD CLASS/DIVISION:2.2 (6.1)UN/NA NUMBER:UN 1950PACKAGING GROUP:N/A

AIR SHIPMENTPROPER SHIPPING NAME:Aerosols, Non-Flammable, Toxic, Containing Substances in Division 6.1 Packaging Group IIIHAZARD CLASS/DIVISION:2.2 (6.1)UN/NA NUMBER:UN 1950PACKAGING GROUP:N/A

SHIPPING BY WATER:VESSEL (IMO/IMDG)PROPER SHIPPING NAME: Aerosols, ToxicHAZARD CLASS/DIVISION: 2.2 (6.1)UN/NA NUMBER:UN 1950PACKAGING GROUP:N/AENVIRONMENTAL HAZARDS WATER: Marine Pollutant

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All Chemicals are listed or exempt. CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): Tetrachloroethylene (127-18-4) Reportable Quantity = 100 lbs **Trichloroethylene** (79-01-6) Reportable Quantity = 100 lbs SARA 311/312 HAZARD CATEGORIES: Acute Health, Chronic Health. SARA 313 REPORTABLE INGREDIENTS: Tetrachloroethylene (127-18-4); Trichloroethylene (79-01-6) STATE REGULATIONS: Trichloroethylene (79-01-6) CA Prop 65: Chemical known to the state of California to cause cancer. RTK: MA, PA, NJ Tetrachloroethylene (127-18-4) CA Prop 65: Chemical known to the state of California to cause cancer. INTERNATIONAL REGULATIONS: Trichloroethylene, CAS 79-01-6, - EC - yes, Japan - yes, Australia - yes, Korea - yes, Canada DSL - yes, Canada NDSL -no, Philipenes - yes. NFPA HEALTH: 2 HMIS HEALTH: 2 NFPA FLAMMABILITY: 1 HMIS FLAMMABILITY: 1 NFPA REACTIVITY: 0 **HMIS REACTIVITY:** 0 None **NFPA OTHER: HMIS PROTECTION:** С

SECTION XVI - ADDTIONAL INFORMATION

PREPARATION BY: Chioma Agbai **DATE PREPARED:** 09/26/2013 **REVISION DATE:** 03/23/2017

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

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