

Safety Data Sheet
Beta-50

SECTION I - IDENTIFICATION

PRODUCT NAME: BETA-50 DIELECTRIC SAFETY DEGREASER
PRODUCT CODE: 2040
PRODUCT USE: Solvent cleaner
COMPANY NAME: BETA TECHNOLOGY, INC.
COMPANY ADDRESS: PO Box 218686, Houston, TX 77218
COMPANY PHONE: 281-647-9700
EMERGENCY PHONE: 800-535-5053 INFOTRAC

SECTION II – HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS: Health, Skin corrosion/irritation, 2
Health, Serious Eye Damage/Eye Irritation, 2A
Health, Germ cel mutagenicity, 2
Health, Carcinogenicity, 1
Health, Specific Target Organ Toxicity - Single Exposure, 3
Environmental, Hazards to the aquatic environment – Acute, 3
Environmental, Hazards to the aquatic environment – Chronic, 3

HAZARD STATEMENT(S): DANGER: Causes skin irritation. Causes serious eye irritation. Suspected of causing genetic defects. May cause cancer. May cause drowsiness or dizziness. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

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. Do not get in eyes, on skin, or on clothing. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. **IF ON SKIN:** Wash with soap and water. **IF INHALED:** Call a POISON CENTER or doctor/physician if you feel unwell. **IF IN EYES:** Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container to an approved waste disposal plant.



SYMBOL:

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Trichloroethylene	79-01-6	>99%

SECTION IV - FIRST AID MEASURES

INHALATION: If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

SKIN: Wash with soap and water. Consult a physician.

EYES: Remove contact lenses. Rinse thoroughly with plenty of water for at least 15 minutes. Consult a physician.

INGESTION: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

ACUTE HEALTH HAZARDS: Inhalation: dizziness, drowsiness, weakness, and fatigue

Eye: stinging, tearing, redness

Oral: Vomiting, nausea, irritation

Skin: Prolonged or repeated contact may dry skin

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

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.

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SECTION V – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

UNSUITABLE EXTINGUISHING MEDIA: N/A **LEL:** 8% (V) **UEL:** 10.5% (V)

SPECIAL FIRE FIGHTING PROCEDURES: Wear self contained breathing apparatus for firefighting if necessary.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE: Carbon oxides, Hydrogen chloride gas

SECTION VI – ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see Section VIII.

ENVIRONMENTAL PRECAUTIONS: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. For disposal see Section XIII.

SECTION VII – HANDLING AND STORAGE

HANDLING PRECAUTIONS: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see Section II.

STORAGE REQUIREMENTS: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Light sensitive. Handle and store under inert gas.

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 3 / toxic hazardous materials or hazardous materials causing chronic effects.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Trichloroethylene	10 ppm	25 ppm

ENGINEERING CONTROLS: Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTIVE EQUIPMENT: EYE/FACE PROTECTION - Safety glasses with side shields conforming to EN 166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

SKIN PROTECTION - Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. **BODY PROTECTION -** Complete suit protecting against chemicals, selected according to the concentration and amount of the dangerous substance at the specific workplace.

RESPIRATORY PROTECTION - Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator, tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, Colorless Liquid

ODOR: N/D

ODOR THRESHOLD: N/D

BOILING POINT: 86.7°C (188.1°F) - lit

FREEZING/MELTING POINT: -84.8°C (-120.6°F) - lit

FLAMMABILITY: N/D

FLASH POINT: N/D

AUTOIGNITION TEMPERATURE: 410°C (770°F)

LOWER FLAMMABILITY LIMIT: 8% (V)

UPPER FLAMMABILITY LIMIT: 10.5% (V)

VAPOR PRESSURE: 81.3 hPa (61.0 mm Hg) at 20°C (68°F)

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VAPOR DENSITY: N/D
EVAPORATION RATE: N/D
SPECIFIC GRAVITY/DENSITY: 1.463 g/mL at 25°C (77°F)
pH: N/D
SOLUBILITY: N/D
PARTITION COEFFICIENT: log Pow: 2.29 log Pow: 5
DECOMPOSITION TEMPERATURE: N/D
EXPLOSIVE PROPERTIES: N/D
OXIDIZING PROPERTIES: N/D

SECTION X – STABILITY AND REACTIVITY DATA

REACTIVITY: N/D
CHEMICAL STABILITY: Stable under recommended storage conditions.
CONDITIONS TO AVOID: N/D
MATERIALS TO AVOID: Oxidizing agents, strong bases, magnesium.
HAZARDOUS DECOMPOSITION OR BY-PRODUCT: N/D. In the event of fire, see Section V.
POSSIBLE HAZARDOUS REACTIONS: N/D

SECTION XI – TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY:

LD50 Oral – rat – 4,920mg/kg LC50 Inhalation – mouse – 4 h – 8,450 ppm LD50 Dermal – rabbit - > 20,000 mg/kg

SKIN CORROSION/IRRITATION: Skin – rabbit. Result: Severe skin irritation – 24 h

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes – rabbit. Result: Eye irritation – 24 h.

RESPIRATORY OR SKIN SENSITIZATION: N/D

GERM CELL MUTAGENICITY: Laboratory experiments have shown mutagenic effects. In vitro tests showed mutagenic effects.

CARCINOGENICITY: This product is or contains a component that has been reported to be probably carcinogenic based on its IARC, OSHA, ACGIH, NTP or EPA classification. Possible human carcinogen.

REPRODUCTIVE TOXICITY: N/D

SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE: N/D

SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE: N/D

ASPIRATION HAZARD: N/D

Burning sensation, cough, wheezing, laryngitis, shortness of breath, headache, nausea, vomiting, exposure to and/or consumption of alcohol may increase toxic effects. Gastrointestinal disturbance, kidney injury may occur, narcosis. To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

SECTION XII – ECOLOGICAL INFORMATION

TOXICITY:

Toxicity to Fish: LC50 – fathead minnow – 41 mg/l – 96 h. LOEC – other fish – 11 mg/l – 10d. NOEC – *Oryzias latipes* – 40 mg/l – 10d.

Toxicity to Daphnia and Other Aquatic Invertebrates: EC50 – *Daphnia magna* (water flea) – 18.00 mg/l – 48 h.

Toxicity to Algae: IC50 – *Pseudokirchneriella subcapitata* (green algae) – 175.00 mg/l – 96 h.

BIOACCUMULATION: This product does not bioaccumulate.

PERSISTENCE AND DEGRADABILITY: N/D **SOIL MOBILITY:** N/D.

OTHER ADVERSE EFFECTS: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects.

SECTION XIII – DISPOSAL CONSIDERATIONS

PRODUCT: Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

CONTAMINATED PACKAGING: Dispose of as unused product.

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SECTION XIV - TRANSPORTATION INFORMATION

UN1710, Trichloroethylene, 6.1, PGIII

DOT (US):

UN NUMBER: 1710

CLASS: 6.1

PACKING GROUP: III

PROPER SHIPPING NAME: Trichloroethylene

REPORTABLE QUANTITY (RQ): 100 lbs

POISON INHALATION HAZARD: No

IMDG

UN NUMBER: 1710

CLASS: 6.1

PACKING GROUP: III

PROPER SHIPPING NAME: Trichloroethylene

IATA:

UN NUMBER: 1710

CLASS: 6.1

PACKING GROUP: III

PROPER SHIPPING NAME: Trichloroethylene

SECTION XV - REGULATORY INFORMATION

SARA 302 COMPONENTS: No chemicals in this material are subject to reporting requirements of SARA Title III, Section 302.

SARA 313 COMPONENTS: The following components are subject to reporting levels established by SARA Title III, Section 313:

Trichloroethylene CAS No. 79-01-3 Revision Date : 2007-07-01.

SARA 311/312 HAZARD CATEGORIES: Acute Health, Chronic Health.

STATE REGULATIONS: **Trichloroethylene** (79-01-6) **WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Trichloroethylene (79-01-6) Right-to-Know acts for Massachusetts, Pennsylvania, New Jersey, California.

NFPA HEALTH: 2
NFPA FLAMMABILITY: 0
NFPA REACTIVITY: 0
NFPA OTHER: None

HMIS HEALTH: 2
HMIS FLAMMABILITY: 0
HMIS REACTIVITY: 0
HMIS PROTECTION: B

SECTION XVI - ADDITIONAL INFORMATION

Beta Technology, Inc. makes no warranty expressed or implied as to the suitability of this material for any particular purpose or use. The ultimate decision as to the application of this item is solely the responsibility of the user. Descriptions and information contained are presented in good faith and believed to be accurate. Conditions of use are beyond Beta Technology, Inc.'s control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product or from the use of, or reliance upon, information contained herein. This information relates only to the product designed herein, and does not relate to its use in combination with any other material or in any other process.