



RAINBOW TECHNOLOGY
Specialists in Utility Chemicals & Safety Items

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www.rainbowtech.net

Woman-Owned Business Enterprise - Founded 1971

Safety Data Sheet (SDS)

SECTION I - IDENTIFICATION

Customer	RAINBOW TECHNOLOGY	Revised Date: September 22, 2023
Product Name	HD Cleaner	Replaces SDS Dated: June 8, 2022
Product Number	87000	
Manufacturer/Supplier	Rainbow Technology Corporation 261 Cahaba Valley Parkway Pelham, AL 35124 800.637.6047 www.rainbowtech.net	
Contact Person	Larry Joe Steeley, Jr.	
Emergency Information	CHEMTEL 1-800-255-3924 813-248-0585 if located outside the U.S.	

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION: Gases Under Pressure: Compressed Gas

Skin Irritant: Category 2

Carcinogenicity: Category 2

Skin Sensitization: Category 1

Specific Target Organ Toxicity (Single Exposure): Category 3

HAZARD STATEMENT(S): WARNING: Contains gas under pressure; may explode if heated. Causes skin irritation. Suspected of causing cancer. May cause an allergic skin reaction. May cause drowsiness or dizziness.

This product contains the following percentage of chemicals of unknown toxicity: N/A

PRECAUTIONARY STATEMENTS: Keep away from heat, sparks, open flames, and hot surfaces. -No smoking. 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/protective clothing/eye protection/face protection. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. Contaminated work clothing must not be allowed out of the workplace. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: Get medical advice or attention. Dispose of contents and container in accordance with local, state, and national regulations.

SYMBOL:



HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
Tetrachloroethylene	127-18-4	80-100%
Carbon dioxide	124-38-9	1-5%

SECTION IV - FIRST AID MEASURES

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: Rinse mouth out with water. Do not induce vomiting unless directed by medical authority. Seek medical attention if irritation persists. Never give anything by mouth to an unconscious person.

INHALATION: Move to fresh air. If breathing is difficult, administer oxygen. If not breathing administer artificial respiration. Seek immediate medical attention.

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

ACUTE HEALTH HAZARDS: Inhalation of vapors may be narcotic or anesthetic. Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea. Liquid or vapors may be irritating to skin and eyes.

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CHRONIC HEALTH HAZARDS: Possible cancer-causing agent. Overexposure may cause dermatitis, dizziness, headache, nausea, mental confusion, and visual disturbances and may damage kidneys, liver, 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.

SECTION V – FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, alcohol foam, and water spray.

UNSUITABLE EXTINGUISHING MEDIA: Water jets or streams.

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. Shut off all sources of ignition. Use water spray to disperse vapor and cool fire exposed containers. Prevent run off from entering streams, sewers, or drinking water supply.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from sparks, open flames and hot surfaces. No smoking. Do not spray on an open flame or other ignition source.

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: 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 disposal.

WASTE DISPOSAL: Dispose of in accordance with local, state and federal 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 U210 (Tetrachloroethylene) under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION VII – HANDLING AND STORAGE

HANDLING AND STORAGE: Wear proper personal protective equipment when using this product. Avoid contact with skin, eyes and clothing. Do not inhale mist or vapor. Store in a cool, dry area. Do not use or store with strong oxidizers. Protect from sunlight. Store in a well ventilated area. Do not expose to temperatures exceeding 50 °C/122 °F. Pressurized container: Do not pierce or burn, even after use. Wash contaminated clothing and shoes thoroughly before reuse. Wash hands thoroughly after handling.

OTHER PRECAUTIONS: Keep out of the reach of children. Read and follow the directions on the product label. They are the best guide to using the product in the most effective manner. The label also gives you the necessary safety precautions to protect your health.

INCOMPATIBILITY: Strong oxidizers, alkalis, and strong acids.

SECTION VIII – EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENT	OSHA PEL	ACGIH TLV
Tetrachloroethylene	100 ppm	25 ppm
Carbon dioxide	5000 ppm	5000 ppm

ENGINEERING CONTROLS / VENTILATION: Use only outdoors or in a well-ventilated area. General ventilation and local exhaust recommended.

RESPIRATORY PROTECTION: Use only in well-ventilated areas. If exposure levels are exceeded, then organic vapor cartridge respirator or SCBA will be needed.

PERSONAL PROTECTIVE EQUIPMENT: Safety glasses/goggles and chemical resistant gloves.

ADDITIONAL MEASURES: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing spray. Wear protective clothing to prevent repeated or prolonged contact with product. Contaminated work clothing must not be allowed out of the workplace. If clothing becomes contaminated, immediately remove and wash. Wash hands thoroughly after handling.

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SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless to slight tint spray.

ODOR: Chlorinated solvent.

ODOR THRESHOLD: N/D

pH: N/A

MELTING POINT/FREEZING POINT: N/D

INITIAL BOILING POINT AND BOILING RANGE: 250 °F (121.1 °C)

FLASH POINT: N/D

EVAPORATION RATE: N/D

FLAMMABILITY (solid/gas): Not considered a flammable aerosol or an extremely flammable aerosol by OSHA (29CFR 1910.1200).

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:

LOWER FLAMMABILITY LIMIT: N/D

UPPER FLAMMABILITY LIMIT: N/D

EXPLOSIVE LIMIT LOWER (%): N/D

EXPLOSIVE LIMIT UPPER (%): N/D

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (AIR=1): N/D

RELATIVE DENSITY (H₂O=1): 1.61 - 1.65 @ 77 °F (25 °C)

SOLUBILITY(IES): Negligible.

PARTITION COEFFICIENT: n-OCTANOL/WATER (K_{ow}): N/D

AUTOIGNITION TEMPERATURE: N/D

DECOMPOSITION TEMPERATURE: N/D

VISCOSITY: N/D

SECTION X – STABILITY AND REACTIVITY

REACTIVITY: None known.

CHEMICAL STABILITY: Stable.

POSSIBLE HAZARDOUS REACTIONS: None known.

CONDITIONS TO AVOID: Temperatures greater than 122 °F and sources of ignition. Avoid incompatible materials.

INCOMPATIBLE MATERIALS: Strong oxidizers, alkalis, and strong acids.

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

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: **Tetrachloroethylene (Perchloroethylene)** (127-18-4): LD₅₀ (Oral, Rat) 2629 mg/kg; LC₅₀ (Inhalation, Mouse, 8hr) 34200 mg/m³. **Carbon dioxide** (124-38-9): LC₅₀ (Inhalation, Rat, 30m) 470,000 ppm.

ROUTES OF ENTRY: Eyes, Inhalation, Skin

EYES: May cause burning, irritation, redness, tearing.

INGESTION: Not a likely route of exposure under normal product handling conditions. Causes gastrointestinal irritation, headaches, nausea, diarrhea, vomiting, abdominal cramps.

INHALATION: Causes respiratory tract irritation, dizziness, headache, nausea, depression of central nervous system (CNS). 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 (CNS).

ACUTE HEALTH HAZARDS: Inhalation of vapors may be narcotic or anesthetic. Ingestion of liquid will cause gastrointestinal distress, irritation, and possibly nausea. Liquid or vapors may be irritating to skin and eyes.

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

CARCINOGENICITY: OSHA: No ACGIH: A3 - Animal Carcinogen NTP: 2 - Anticipated

IARC: 2A - Probable OTHER: CA Prop 65

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SECTION XII – ECOLOGICAL INFORMATION

ECOTOXICITY: Toxic to aquatic life with long lasting effects. **Tetrachloroethylene (Perchloroethylene)** (127-18-4): LC₅₀ (*Pimephales promelas*, 96h) 18.4 mg/L; LC₅₀ (*Oncorhynchus mykiss*, 96hr) 5 mg/L; LC₅₀ (*Lepomis macrochirus*, 96hr) 12.9 mg/L; LC₅₀ (*Cyprinodon variegatus*, 96h) 29.4 - 52.2 mg/L; LC₅₀ (Mysid shrimp, 96h) 10.2 mg/L; EC₅₀ (*Daphnia magna*, 48h) 18 mg/L.

PERSISTENCE AND DEGRADABILITY: Component or components of this product are not biodegradable.

BIOACCUMULATIVE POTENTIAL: This product is not expected to bioaccumulate.

MOBILITY IN SOIL: This product is mobile in soil.

OTHER ADVERSE EFFECTS: None known.

SECTION XIII – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Dispose of in accordance with local, state and federal 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 U210 (Tetrachloroethylene) under RCRA, however product should be fully characterized prior to disposal (40 CFR 261).

SECTION XIV - TRANSPORT INFORMATION

PROPER SHIPPING NAME: Aerosols, Ltd. Qty.

HAZARD CLASS/DIVISION: 2.2

UN/NA NUMBER: UN1950

PACKING GROUP: N/A

AIR SHIPMENT

PROPER SHIPPING NAME: Aerosols, non-flammable.

HAZARD CLASS/DIVISION: 2.2

UN/NA NUMBER: UN1950

PACKING GROUP: N/A

SHIPPING BY WATER:

VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Aerosols.

HAZARD CLASS/DIVISION: 2.2

UN/NA NUMBER: UN1950

PACKING GROUP: N/A

ENVIRONMENTAL HAZARDS WATER: Marine Pollutant.

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): **Tetrachloroethylene (Perchloroethylene)** (127-18-4) Reportable Quantity = 100 pounds.

SARA 311/312 HAZARD CATEGORIES: Gas under pressure. Skin corrosion or irritation. Respiratory or skin sensitization. Carcinogenicity. Specific target organ toxicity (single or repeated exposure).

SARA 313 REPORTABLE INGREDIENTS: **Tetrachloroethylene (Perchloroethylene)** (127-18-4).

CLEAN WATER ACT: **Tetrachloroethylene (Perchloroethylene)** (127-18-4) is a priority pollutant and a toxic pollutant.

STATE REGULATIONS: California Proposition 65: WARNING: This product can expose you to chemicals including Tetrachloroethylene (Perchloroethylene), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov. **Tetrachloroethylene (Perchloroethylene)** (127-18-4): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: CT, FL, IL, LA, MA, MI, MN, NJ, NY, RI, PA, TN.

INTERNATIONAL REGULATIONS: Listed or exempt from listing/notification on the following chemical inventories: Australian Inventory of Industrial Chemicals (AIIC, Australia). Domestic Substances List (DSL, Canada). Inventory of Existing Chemical Substances in China (IECSC, China). Existing and New Chemical Substances (ENCS, Japan). New Zealand Inventory of Chemicals (NZIoC, New Zealand). Philippine Inventory of Chemicals and Chemical Substances (PICCS, Philippines). Korea Existing Chemicals Inventory (KECI, South Korea).

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VOLATILE ORGANIC COMPOUNDS (VOC): 0%

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 - OTHER INFORMATION

PREPARATION BY: Roberto Cerón

DATE PREPARED: 07/29/2013

REVISION DATE: 03/17/2023

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

DISCLAIMER: To the best of our knowledge, information contained herein is accurate. However, there is no assumption of liability for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazard which exists. The information contained in this SDS was obtained from current and reliable sources; however, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions or handling, storage and disposal of this product are beyond the control of the manufacturer, the manufacturer will not be responsible for loss, injury, or expense arising out of the products improper use. No warranty, expressed or inferred, regarding the product described in this SDS shall be created or inferred by any statement in this SDS. Various government agencies may have specific regulations regarding the transportation, handling, storage, use, or disposal of this product which may not be covered by this SDS. The user is responsible for full compliance.