

Safety Data Sheet
HVAC Guys Line and System Flush

SECTION I - IDENTIFICATION

PRODUCT IDENTIFIER: HVAC Guys Line and System Flush
PRODUCT CODE: 136350000
RECOMMENDED USE: Air Conditioner and Refrigerator System Flush
RESTRICTIONS ON USE: None known.
COMPANY NAME: Professional HVAC Products
COMPANY ADDRESS: 1309 Coffeen Av., Suite 1200, Sheridan, WY 82801
COMPANY PHONE: 888-675-6088
EMERGENCY PHONE: 800-255-3924

SECTION II – HAZARDS IDENTIFICATION

CLASSIFICATION: Gases Under Pressure: Liquefied Gas
Eye Irritant: Category 2A
Skin Irritant: Category 2
Specific Target Organ Toxicity (Single Exposure): Category 3
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 be fatal if swallowed and enters airways.

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 and eye protection. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it 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 advice or attention. Avoid breathing mist, vapors or spray. Use only outdoors or in a well-ventilated place. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell. If swallowed: Immediately call a poison center or doctor. Do NOT induce vomiting. Dispose of contents and container in accordance with local, state and federal regulations.

SYMBOL:



HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III – COMPOSITION/INFORMATION ON INGREDIENTS

HAZARDOUS INGREDIENT	CAS NUMBER	PERCENT
trans-1,2-Dichloroethylene	156-60-5	40-50%
1,1,1,2-Tetrafluoroethane	811-97-2	10-20%
Ethyl alcohol	64-17-5	5-10%

SECTION IV - FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Seek medical attention if irritation persists.

INGESTION: Rinse mouth out with water. Do not induce vomiting unless directed by medical authority. Keep head below hips if vomiting occurs. Seek immediate medical attention. Aspiration hazard. 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 or at any sign of loss of consciousness 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.

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ACUTE HEALTH HAZARDS: Causes eye irritation including redness, tearing, and pain. Causes skin irritation including redness, burning and drying/cracking. Inhalation of vapors may cause nausea, dizziness and drowsiness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

CHRONIC HEALTH HAZARDS: May cause damage to the following organs: kidneys, liver, skin, CNS depression. Prolonged inhalation may be harmful.

NOTE TO PHYSICIAN: Treatment of overexposure should be directed at the control of symptoms and the clinical condition. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

SECTION V – FIRE-FIGHTING MEASURES

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

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.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Keep away from heat, sparks, open flames and hot surfaces. No smoking. Contents under pressure. Exposure to temperatures above 120 °F may cause bursting. Keep away from heat, sparks, open flames and other sources of ignition.

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

SECTION VI – ACCIDENTAL RELEASE MEASURES

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

SPILL: Absorb with non-combustible material like vermiculite, sand or earth. Place waste in proper containers for waste disposal. U.S. regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll-free number for the U.S. Coast Guard National Response Center is 800-424-8802.

WASTE DISPOSAL: Dispose of in accordance with local, state, and federal regulations. Containers may be hazardous when empty.

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: Wear proper personal protective equipment when using this product. Avoid contact with skin, eyes and clothing. Do not store near acids or strong oxidizers. Store in a cool, dry area. Protect from sunlight. Store in a well ventilated area. Do not expose to temperatures exceeding 70 °C/155 °F. Pressurized container: Do not pierce or burn, even after use.

OTHER PRECAUTIONS: Keep out of the reach of children. Aspiration hazard if swallowed. Can enter lungs and cause damage. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Do not taste or swallow. 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
trans-1,2-Dichloroethylene	200 ppm	200 ppm
1,1,1,2-Tetrafluoroethane	Not Established	Not Established
Ethyl alcohol	1000 ppm	1000 ppm

ENGINEERING CONTROLS / VENTILATION: Use only outdoors or in a well-ventilated area.

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved respiratory protection if exposure limits are exceeded.

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

ADDITIONAL MEASURES: Avoid contact with skin or eyes and avoid breathing vapors. Wash hands after use. If clothing becomes contaminated, immediately remove and wash.

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SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless spray

ODOR: Solvent odor

ODOR THRESHOLD: N/D

pH: N/D

MELTING POINT/FREEZING POINT: N/D

INITIAL BOILING POINT AND BOILING RANGE: N/D

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): 1.25 - 1.26 @ 77 °F (25 °C)

SOLUBILITY(IES): N/D

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: Avoid excess heat and open flames. Avoid incompatibles.

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

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

SECTION XI – TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: **trans-1,2-Dichloroethylene** (156-60-5): LD₅₀ (Oral, Rat) 1235 mg/kg; LD₅₀ (Dermal, Rabbit) >5000 mg/kg; LC₅₀ (Inhalation, Rat, 4h) 24100 ppm. **1,1,1,2-Tetrafluoroethane** (811-97-2) LC₅₀ (Inhalation, Rat, 4h) > 2000 mg/L; LC₅₀ (Inhalation, Rat, 4h) > 359300 ppm. **Ethyl alcohol** (64-17-5): LC₅₀ (Inhalation, Rat, 4h) 133.6 mg/L; LD₅₀ (Oral, Rat) > 8311 mg/kg; LD₅₀ (Dermal, Rabbit) 16972.5 mg/kg.

ROUTES OF ENTRY: Eyes, Ingestion, Inhalation, Skin

EYES: Causes irritation, redness, tearing.

INGESTION: Causes gastrointestinal irritation, nausea, diarrhea. Absorption through gastrointestinal tract may produce symptoms of central nervous system depression ranging from light headedness to unconsciousness.

INHALATION: Causes dizziness, headaches, nausea, central nervous system depression (CNS), excessive or prolonged exposure may cause unconsciousness.

SKIN: Causes irritation, redness, burning.

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

ACUTE HEALTH HAZARDS: Causes eye irritation including redness, tearing, and pain. Causes skin irritation including redness, burning and drying/cracking. Inhalation of vapors may cause nausea, dizziness and drowsiness. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

CHRONIC HEALTH HAZARDS: May cause damage to the following organs: kidneys, liver, skin, CNS depression. Prolonged inhalation may be harmful.

CARCINOGENICITY: **OSHA:** No **ACGIH:** No **NTP:** No **IARC:** No **OTHER:** Ethyl alcohol possesses properties that indicate a carcinogenicity hazard for human health, but these are manifest only at doses associated with consumption of alcoholic beverages.

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SECTION XII – ECOLOGICAL INFORMATION

ECOTOXICITY: Harmful to aquatic life with long lasting effects. **trans-1,2-Dichloroethylene** (156-60-5): EC₅₀ (*Daphnia magna*, 48h) 220 - 290 mg/L; NOEC (*Daphnia magna*, 48h) < 100 mg/L. **Ethyl alcohol** (64-17-5): LC₅₀ (Fish, 96h) 12,900 - 15,300 mg/L; LC₅₀ (Bacteria, 24h) 11,200 mg/L; EC₅₀ (Bacteria, 5 - 30m) 34,900 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. Containers may be hazardous when empty.

RCRA STATUS: Waste likely considered hazardous 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: N/A

SECTION XV - REGULATORY INFORMATION

TSCA STATUS: All chemicals are listed or exempt.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): **1,2-Dichloroethylene** (156-60-5)

Reportable Quantity = 1000 pounds.

SARA 311/312 HAZARD CATEGORIES: Gas under pressure. Skin corrosion or irritation. Serious eye damage or eye irritation.

Specific target organ toxicity (single or repeated exposure). Aspiration hazard.

SARA 313 REPORTABLE INGREDIENTS: This product does not contain any chemical components with known CAS numbers that exceed the threshold (*de minimis*) reporting levels established by SARA Title III, Section 313.

CLEAN WATER ACT: **trans-1,2-Dichloroethylene** (156-60-5) is a priority pollutant and a toxic pollutant.

STATE REGULATIONS: California Proposition 65: This product contains no known chemicals regulated by California Proposition 65. **trans-1,2-Dichloroethylene** (156-60-5): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: MA, PA. **Ethyl alcohol** (64-17-5): Included on State Hazardous Substances Inventories, Right-to-Know lists and/or Air Quality or Air Pollutants lists for the following states: CA, ID, MA, MN, NJ, PA, RI, WA.

INTERNATIONAL REGULATIONS: No information available.

VOLATILE ORGANIC COMPOUNDS (VOC): 54.6%

NFPA HEALTH: 2

NFPA FLAMMABILITY: 1

NFPA REACTIVITY: 0

NFPA OTHER: None

HMIS HEALTH: 2

HMIS FLAMMABILITY: 1

HMIS REACTIVITY: 0

HMIS PROTECTION: B

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SECTION XVI - OTHER INFORMATION

PREPARATION BY: Roberto Cerón

DATE PREPARED: 04/25/2022

REVISION DATE: N/A

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 of 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.