Manufacturer's Name: THE RAMSEY COMPANY
Address: 24020 S. Frampton Avenue
Harbor City, CA 90710
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Person Responsible for Preparation: Jeff Buckel
Date Prepared: September, 1989

IDENTITY

Common Name: VOLATILE-DRY SPOTTER
Proper Shipping Name, Hazard Class, Hazard ID No.: 1,1,1-Trichloroethane, ORM-A, UN2331

INGREDIENT INFORMATION

Principal Hazardous Component(s) CAS No. % Threshold Limit
1,1,1-Trichloroethane 71-55-6 96.5 TLV/PEL: 350 ppm STEL: 450 ppm

SARA Title III Section 313 and 40 CFR Part 372 Notification:
1,1,1-Trichloroethane is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

PHYSICAL & CHEMICAL CHARACTERISTICS

Boiling Point 165°F Specific Gravity 1.3 Vapor Pressure 100 mmHg @ 20°C
Percent Volatile by Volume 100 Vapor Density 4.55 pH NA
Evaporation Rate (Ether=1) 0.37 Solubility in Water 0.07 g/100g @ 25°C
Appearance and Odor Colorless liquid; mild sweet odor
Flash Point >200°F (T.C.C.) Flammable Limits LFL: 7.5 @ 25°C UFL: 15 @ 25°C
Extinguisher Media Water fog

Special Fire Fighting Procedures: Do not enter confined fire space without proper protective equipment including a NIOSH approved self-container, positive pressure, breathing apparatus. Cool fire exposed containers with water.

Unusual Fire and Explosion Hazards: Vapor of this solvent may develop a flammable atmosphere in confined areas.

0013R

HMIS RATING
Health 3
Flammability 1
Reactivity 1

N.D. = Not Determined, N.E. = Not Established, N.A. = Not Applicable
REACTIVITY DATA

Stability Stable
Conditions to Avoid Avoid open flames, welding arcs or other high temperature sources which induce thermal decomposition.

Incompatibility Water: long term contact with water can deplete stabilizers followed by slow hydrolysis producing corrosive acid. Avoid prolonged contact with, or storage in, aluminum or its alloys. Metallic aluminum and zinc powders should be avoided.

Hazardous Decomposition Products Hydrogen chloride and very small amounts of phosgene and chlorine.

Hazardous Polymerization Will Not Occur
Conditions to Avoid None known to The Ramsey Company

HAZARD DATA

Signs and Symptoms of Exposure Contact with liquid or vapor may irritate eyes and skin. Inhalation of vapor may cause minimal anesthetic or narcotic effects in the range of 500-1000 ppm Trichloroethane. Progressively high concentrations of Trichloroethane, over 1000 ppm may cause dizziness, drunkenness and concentration as low as 10,000 ppm can cause unconsciousness and death. In confined or poorly ventilated areas, vapors which readily accumulate can cause unconsciousness and death. These high levels may also cause cardiac arrhythmias (irregular heartbeats), liver abnormalities and kidney damage. May be harmful if swallowed, aspiration into lungs may lead to injury of other body systems. Pre-existing eye, skin and respiratory disorders may be aggravated.

Chemicals Listed as Carcinogens or Potential Carcinogens None

Emergency and First Aid Procedures
1. Inhalation Remove to fresh air. If not breathing, give mouth-to-mouth resuscitation. If breathing is difficult, give oxygen. Seek immediate medical attention.
2. Eyes Flush with water for at least 15 minutes. Call a physician if irritation develops.
3. Skin Flush with water. Call a physician if irritation develops.
4. Ingestion Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

NOTE TO PHYSICIAN: Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by an attending physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Exposure may increase "myocardial irritability." Do not administer sympathomimetic drugs unless absolutely necessary. No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.
SPECIAL PROTECTION INFORMATION

Ventilation: This product should only be used with adequate ventilation. Control airborne concentrations below the exposure guideline. Local exhaust ventilation may be necessary for some operations. Lethal concentrations may exist in areas with poor ventilation.

Respiratory Protection Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved positive pressure self-contained breathing apparatus.

Protective Gloves When prolonged or repeated contact is possible, wear rubber or other impervious gloves.

Eye Protection If eye contact is possible, wear chemical splash goggles.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Handling and Storage Use good personal hygiene practice. Wash contaminated clothing and equipment before reuse. Avoid breathing vapors. Store in a cool dry place. Concentrated vapors of this product are heavier than air and will collect in low areas such as pits, degreasers, storage tanks, and other confined areas. Do not enter areas where vapors of this product are suspected unless special breathing apparatus is used and an observer is present for assistance.

Release or Spill Before attempting clean-up, refer to Hazard Data above. Evacuate area and dike large spills. Pump into salvage containers. Soak up residues and small spills with absorbent such as clay or vermiculite and place into leak proof containers for disposal. Keep out of water supplies. Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) the Reportable Quantity (RQ) for 1,1,1-Trichloroethane is 1000 pounds.

Waste Disposal When disposing of the unused contents, the preferred options are to send to licensed reclaimer, permitted incinerators, or to evaporate small quantities in compliance with local, state, and federal regulations. Dumping into sewers, on the ground, or into any body of water is strongly discouraged, and may be illegal.

The information on this data sheet represents our current data and best opinion as to the proper use in handling of this product under normal conditions. Any use of the product which is not in conformance with this data sheet or which involves using the product in combination with any other product or any other process is the responsibility of the user.