

MATERIAL SAFETY DATA SHEET
Cortec, Spray Technologies Division

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EMERGENCY PHONE NO. (FOR SPILL, LEAK, FIRE,
EXPOSURE OR ACCIDENT): 1-800-535-5053

***** DUST-A-WAY 10119, 10130 *****

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: Dust-A-Way (*self pressurized*)
PRODUCT DESCRIPTION: An inert, dry gas product used for removing foreign particles from delicate devices (keyboards, circuit boards, computers, electronic components, photographic and video equipment). Does not deplete ozone.
RESTRICTIONS: Non-restricted

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT NAME(S)	CAS #	OCCUPATIONAL EXPOSURE LIMITS	
		TLV OR PEL	ORAL LD-50
1,1,1,2- Tetrafluoro- ethane	811-97-2	1000 ppm (See below*)	N.E.

* AIHA established Workplace Environmental Exposure Level (WEEL)

Carcinogenic: OSHA = no NTP = no IARC = no

SECTION III - PHYSICAL DATA

APPEARANCE: Clear, colorless, liquified gas
ODOR: Faint ethereal odor
BOILING POINT: -15 Degrees F. (-26.2 degrees C.)
VAPOR DENSITY (Air = 1): 3.18
VAPOR PRESSURE: 4268 mmHg @ 20 degrees C.
SOLUBILITY IN WATER: Very low (0.15% by weight)
SPECIFIC GRAVITY: 1.27 at 20 degrees C.
EVAPORATION RATE: (Ether = 1) >1

SECTION IV - FIRE AND EXPLOSION DATA

HMIS RATING: Health - 1, Fire - 0, Reactivity - 1
FLASH POINT: None
FLAMMABLE LIMITS: LEL: N.A UEL:
N.A.
EXTINGUISHING MEDIA: As appropriate for surrounding combustibles.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Decomposition may occur with exposure to high temperature or open flames. Heated containers may over-pressurize and fail explosively.
SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear self-contained breathing apparatus. Cool fire-exposed containers with water fog.

SECTION V - HEALTH HAZARD DATA

EMERGENCY AND FIRST AID PROCEDURES:
Eye Contact: If liquid phase contents are sprayed into eyes, immediately flush eyes with tepid water for at least 15 minutes and immediately consult a physician; freeze burns can occur if liquid phase of gas contents contacts eye tissue. Skin Contact: If liquid phase contents are sprayed onto skin, rinse affected area with tepid water. If freeze burn occurs, skin irritation develops or persists, consult a physician promptly. Inhalation: Remove to fresh air, administer oxygen if

necessary. If victim has stopped breathing begin CPR, get immediate medical attention. Ingestion: If liquid phase contents are swallowed, get immediate medical attention; liquid phase contents can freeze mucous membranes, eye tissues and skin. **IMPORTANT:** Keep container upright during use; avoid inverting, tilting or shaking can during use - failure to observe this warning may result in liquified gas being expelled from can to possibly damage work pieces or cause freeze burn of skin.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Cardiovascular disease
PRIMARY ROUTES OF ENTRY: Inhalation, skin and eye contact.

HEALTH HAZARDS (acute and chronic) / EFFECTS OF OVEREXPOSURE:

1. Acute skin contact with liquified gas phased contents; contact may result in freeze burns to exposed tissues.
2. Contact of eye tissues with liquified gas phased contents may result in freeze burns.
3. Excessive inhalation of high vapor concentrations may cause dizziness, weakness, fatigue, nausea, headache, unconsciousness, possible asphyxiation.
4. Swallowing this product is expected to cause headache, nausea, vomiting, stomach cramps and diarrhea.
5. LC-50 for 1,1,1,2-Tetrafluoroethane (rats) is 4 HR >500,000 ppm.

SECTION VI - REACTIVITY DATA

STABILITY: Stable under normal use and storage conditions.
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS (under fire conditions): Hydrochloric and hydrofluoric acids, possibly carbonyl halides.
INCOMPATIBILITY: Avoid alkali or alkaline earth metals, powdered Al, Zn, Be, etc.
CONDITIONS TO AVOID: Contact with incompatible materials and open flames.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contents are rapidly absorbed into air.
WASTE DISPOSAL: Dispose of unwanted material in accordance with existing Federal, State and Local environmental regulations; unwanted product may be reclaimed or incinerated by permitted facilities.

SECTION VIII - SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: Not normally required; mechanical (general) ventilation is generally adequate. Wear a NIOSH approved respirator for organic vapors may be worn in nuisance-level vapor concentrations; a positive pressure, air-supplied respirator is recommended in high vapor concentrations or oxygen deficient atmospheres.
PROTECTIVE GLOVES: PVA or neoprene gloves.
EYE PROTECTION: Safety glasses, splash goggles, face shield.
OTHER PROTECTIVE EQUIPMENT: Eye wash station.

SECTION IX - SPECIAL PRECAUTIONS AND STORAGE DATA

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid eye and skin contact with liquid. Avoid excessive inhalation of vapors. Use in a well-ventilated environment. Intentional inhalation of contents is harmful and may be fatal.

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PRECAUTIONS TO BE TAKEN IN STORING: Store containers below 120° F. (48° C.), away from heat sources, open flame, out of direct sunlight.

SECTION X - SHIPPING DATA

U.N. / N.A. NUMBER: UN3159
DOT/IATA SHIPPING NAME: 1,1,1,2-Tetrafluoroethane
DOT/IATA HAZARD CLASS: 2.2
DOT/IATA REQUIRED LABELS: 2, Non-flammable gas (air and vessel shipments)
DOT EXCEPTION (Domestic shipments only): DOT-E 10232 (6th revision) excepts this product from Code 49 regulation(s) 173.304(a) and 173.306(a). Modified "2Q" specification containers of capacity not exceeding 33 cubic inches (18.5 fluid ounces) filled with 1,1,1,2-Tetrafluoroethane and meeting section 171.8 definition "consumer commodity" are permitted reclassified as ORM-D material and renamed "Consumer commodity" when shipped via ground mode, domestically. *Copy of DOT-E 10232 is periodically revised by DOT and is always available upon request by telephoning DOT at (202) 366-4510. Copy of DOT-E 10232 must accompany air and vessel shipments of this material.*
TECHNICAL SHIPPING NAME: Refrigerant gas R-134a
IMDG SHIPPING NAME: 1,1,1,2-Tetrafluoroethane
FREIGHT CLASS: NMFC 86150
LTL: 70 TL: 40
MW: 30
T.S.C.A STATUS: Listed

PREPARED BY: Roger Hanson
DATE PREPARED: 12-19-00 SUPERSEDES: 01-26-00

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N.E. = NOT ESTABLISHED N.A. = NOT APPLICABLE