

MSDS Information



Section 1. CHEMICAL PRODUCT SECTION
 Product Name: ECG ELECTRONICS DEGREASER AND WASH
 Product Number: RX400-20 AEROSOL
 General Use:
 Product Description:

MANUFACTURER: For Chemical Emergency, Spill, Leak,
 Fire NTE Electronics, Inc.
 44 Farrand St. Exposure, or Accident Call CHEMTREC
 Bloomfield, NJ 07003 DAY OR NIGHT 1-800-424-9300.

Phone: 973-748-5089

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 Section 2. COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL	C.A.S. Number	Weight %
Dichlorofluoroethane	1717-00-6	85-90
Ethyl Alcohol	64-17-5	< 10
Denatured with Methanol	67-56-1	1.44
PROPELLANT CARBON DIOXIDE	124-38-9	<3

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

	Exposure Limits 8 Hours TWA (PPM)		
	OSHA PEL	ACGIH TLV	Supplier
Dichlorofluoroethane			500
Ethyl Alcohol Denatured with Methanol	1000	1000	
CARBON DIOXIDE	200		
	10,000		

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 Section 3. HAZARD IDENTIFICATION

Emergency Overview:

Potential Health Effects:

INHALATION: Major route of exposure. Vapor is heavier than air and can cause suffocation by reducing the available oxygen for breathing. Breathing high concentrations of vapor may cause light-headedness, giddiness, shortness of breath, confusion, and may lead to narcosis, cardiac irregularities, or unconsciousness. Inhalation of high concentrations in a closely confined area may be fatal.

EYES: Liquid contact will irritate eyes and may cause conjunctivitis.

SKIN: Not a corrosive or irritant; however, repeated or prolonged exposure can cause defatting of skin.

INGESTION: Single dose toxicity is low to moderate. If vomiting occurs the liquid can be aspirated into lungs, which can cause chemical pneumonia and systemic effects. Human psychotropic, gastrointestinal, and central nervous system effects possible. Large quantities could cause blindness due to Methanol Content.

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Section 4. FIRST AID MEASURES

Inhalation:

Move to fresh air in case of accidental inhalation of vapors. If victim has stopped breathing, give artificial respiration. Call for prompt medical attention.

Eye Contact:

Flush eyes with large amounts of water for 15 minutes or until irritation subsides. If irritation persists, get medical attention.

Skin Contact:

Remove contaminated clothing (including shoes) and wash before reuse. Flush with large amounts of water. Use soap if available. If irritation persists, seek medical attention.

Ingestion:

Do not induce vomiting unless directed by a physician. If conscious and alert, give two glasses of water. Seek medical attention immediately.

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Section 5. FIRE FIGHTING MEASURES

Flash Point & Method: NON-FLAMMABLE (TCC)
Flammable Limits: LEL: 7.4 UEL: 15.5
Autoignition Temperature: Not Established
Calculated Heat of Combustion 4.7 kj/g NFPA Level 1 Aerosol

GENERAL HAZARD:

Aerosol cans may erupt with force at temperatures above 120 degrees F.

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear self contained, positive-pressure breathing apparatus and avoid contact with fumes which could contain hydrochloric and hydrofluoric acid.

FIRE FIGHTING EQUIPMENT:

Water, foam, dry chemical, carbon dioxide.

HAZARDOUS COMBUSTION PRODUCTS:

Smoke, fumes and oxides of carbon.

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Section 6.

ACCIDENTAL RELEASE MEASURES

LAND SPILL:

Evacuate area. Ventilate area well and avoid breathing vapors. Vapor concentration will be highest along floor and in low lying areas. Pick up liquid on suitable absorbent and store in sealed containers.

Shut off fire sources. Workers should wear proper equipment to work in clean up area.

WATER SPILL:

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Section 7.

HANDLING AND STORAGE

STORAGE TEMPERATURE: Ambient

STORAGE PRESSURE: Atmospheric

GENERAL:

Keep container closed when not in use. Store in cool, well ventilated place out of direct sunlight and away from incompatible materials.

(See STABILITY AND REACTIVITY Section 10.) Follow all MSD Sheet and Label warnings even after container is emptied.

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Section 8.

EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering Controls:

- Local Exhaust ventilation acceptable.
- Mechanical ventilation recommended.
- Use explosion-proof ventilation equipment.
- Do not use in confined spaces without mechanical ventilation equipment.

See section 2 for component exposure guidelines.

Personal Protection:

RESPIRATOR:

If concentrations are over the exposure limit and are known, air purifying respirator with Organic Vapor Cartridges may be acceptable. Refer to cartridges for acceptable levels. If concentrations are over exposure limit and are unknown, use a supplied air respirator.

HAND PROTECTION:

- Gloves recommended
 - Solvex
 - Butyl
 - Natural Latex
 - Neoprene
 - Buna
 - Cotton/Jersey

EYE PROTECTION:

- Safety Glasses
- Chemical Goggles
- Full Face Shield

OTHER RECOMMENDATIONS:

() Rubber Boots

() Splash-proof chemical resistant suit/apron

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 Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Density.....	1.21	pH.....	NA
Boiling Point.....	35 C / F	% Volatile.....	100
Freezing Point.....	-103C / -153F	% Solids.....	0
Vapor Pressure:.....	10 PSIA 70F	Evaporation Rate (H2O=1)...	>1
Solubility in Water.....	10	Viscosity.....	N/A
Molecular Weight.....	N/A (mixture)	Physical State.....	LIQUID
Non-Exempt VOC (g/l)....	100	Odor.....	ethereal

Composite Vapor Pressure 10.68 mm Hg
 Appearance: Clear water-white mobile liquid with slight ethereal odor.

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 Section 10. STABILITY AND REACTIVITY

GENERAL:

STABLE

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Contact with open flame, heat.

Reactive alkali metals, strong acids & bases.

HAZARDOUS DECOMPOSITION:

Hydrogen chloride, phosgene, chlorine, carbon dioxide, and carbon monoxide.

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 Section 11. TOXICOLOGICAL INFORMATION

RESULTS OF COMPONENT TOXICITY TEST PERFORMED:

Oral Rat LD50: >5g/kg

Deramal LD50: >2g/KG

Inhalation 4 hour LC50: 62000ppm

HUMAN EXPERIENCE:

High exposures can cause central nervous system depression

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 Section 12. ECOLOGICAL INFORMATION

FURTHER INFORMATION:

Oral Rat LD50: >5g/kg

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 Section 13. DISPOSAL CONSIDERATIONS

RCRA 40 CFR 261 Classification:

Federal, State, and Local laws governing disposal of materials can differ.
 Ensure proper disposal compliance with proper authorities before disposal.

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 Section 14. TRANSPORTATION INFORMATION

U.S. DOT Information

Proper Shipping Name: CONSUMER COMMODITY ORM-D
Hazard Class: N/A
Packaging Group: N/A
UN Number: N/A
Limitations: N/A

IATA

Proper Shipping Name: Consumer Commodity ID8000
Hazard Class: 9
Packing Group: N/A
UN Number: ID8000
Limitations: Domestic Air shipments only.
When shipping International please contact
Tech Spray's shipping department. CARGO AIRCRAFT ONLY

IMO

Proper Shipping Name: Aerosols in Limited Quantities of Class 2
Class: 2
UN Number: UN1950
Packaging Group: N/A
EMS: 2-13
MFAG: 306
Marine Pollutant: N/A
Canadian TDG: N/A
IMDG Page: 2102

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Section 15. REGULATORY INFORMATION

UNITED STATES FEDERAL REGULATIONS:

MSDS complies with OSHAs Hazard Communication Rule, 29 CFR 1910.1200.

CERCLA/SUPERFUND, 40 CFR 117, 302:

--- None of the chemicals are Superfund hazards ---

SARA SUPERFUND AND REAUTHORIZATION ACT OF 1986

TITLE III Sections 302, 311, 312 and 313:

Section 302 - Extremely hazardous substances (40 CFR 355):

--- None of the chemicals are Section 302 hazards ---

Section 311/312 - Material Safety Data Sheet Requirements (40 CFR 370)

- () By our hazard evaluation, this product is non-hazardous.
- (X) By our hazard evaluation, this product is hazardous. It should be reported under the following EPA hazard.
 - (X) Immediate (acute) health hazard
 - () Delayed (chronic) chronic health hazard
 - () Sudden release of pressure hazard
 - () Reactive hazard

Section 313 - List of Toxic Chemicals (40 CFC 372)

This product contains the following chemicals (at levels of 1% or greater) which are found on the 313 list of Toxic Chemicals.

CHEMICAL	C.A.S. NUMBER	WEIGHT %
Dichlorofluoroethane	1717-00-6	85-90
Methanol	67-56-1	1.44

TOXIC SUBSTANCE CONTROL ACT (TSCA): All substances are TSCA Listed.

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA 40 CFR 261) Subpart C & D:
Refer to Section 11. for RCRA classification.

FEDERAL WATER POLLUTION CONTROL ACT, CLEAN WATER ACT, 40 CFR 401.15
(FORMERLY SECTION 307), 40 CFR 116 (FORMERLY SECTION 311)

This product contains the following chemicals which are listed:

CHEMICAL	C.A.S. NUMBER	WEIGHT %
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CLEAN AIR ACT: --- HCFC-141b is an exempt VOC. Product must be used for
electrical or aircraft applications ---

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65:

This product contains the following ingredients which appear on the
California proposition 65 list:

CHEMICAL	C.A.S. NUMBER	WEIGHT %
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--- None of the chemicals are on the Proposition 65 list ---

INTERNATIONAL REGULATIONS:

CANADA WHMIS: REGULATED A, B.5, D.2.B

EUROPE EINECS NUMBERS: Dichlorofluoroethane; 1717-00-6

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Section 16.

OTHER INFORMATION

LABEL INFORMATION:

European risk and Safety Phrases: S2, S23, S24/25, S51, R20/22

European Symbols Needed: HARMFUL

Canadian WHIMS Symbols: TOXIC, Compressed Gas

NFPA HAZARD RATING:

(2) Fire (2) Health (1) Reactivity

REVISION DATES, SECTIONS, REVISED BY:

17-MAY CREATED BY S. COOK

ABBREVIATIONS USED IN THIS DOCUMENT:

NE - Not Established, NA - Not Applicable, NIF - No Information Found

REFERENCES:

Code of Federal Regulations (CFR)

The Sigma-Aldrich Library of Regulatory and Safety Data

Chemical Guide and OSHA Hazard Communication Standard

Various Federal, State & Local Regulations

To the best of our knowledge, the information contained herein is accurate. However, neither Stratus, Inc. or any of its subsidiaries assumes any liability whatsoever 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 hazards which exist.
