

MSDS Information

Section 1. CHEMICAL PRODUCT SECTION

Product Name: ECG RX1400-20
 Product Number: ECG Defluxer
 General Use:
 Product Description:



MANUFACTURER: NTE Electronics, Inc.
 44 Farrand St.
 Bloomfield, NJ 07003

For Chemical Emergency, Spill, Leak, Fire
 Exposure, or Accident Call CHEMTREC
 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	90-95
Ethyl-S(-)-hydroxypropionate	97-64-3	< 1
Methanol		67-56-1
4-4.5		
PROPELLANT		
Carbon Dioxide	124-38-9	<3

OSHA HAZARDOUS COMPONENTS (29 CFR 1910.1200):

Hours TWA (PPM)	OSHA PEL	ACGIH	Exposure Limits 8
TLV			
Supplier			
Dichlorofluoroethane			500
Ethyl-S(-)-hydroxypropionate			
Methanol	200	200	
Carbon Dioxide	5000		

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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, unconsciousness or could even become 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.

CHRONIC: TOXICOLOGY INFORMATION: Ethyl-S-(-)hydroxypropionate
 Mutagenicity: No positive response for several tested strains of Salmonella Typhimurium. Oral intake LD50 > 2000 mg/kg body weight
 FDA and FAO/WHO approval as food additive. Due to the available enzymes, product immediately degrades into lactic acid and ethanol.
 Skin Contact: Slight erythema produced by percutaneous application of 2068 mg/kg/day to 2103 mg/kg/day to the dams. Inhalation: LC50 value > 5000 mg/m³ air. Eye contact: Possible slight temporary eye irritation.

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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 (C)

Flammable Limits: LEL: NE UEL: NE

Autoignition Temperature:

Calculated Heat of Combustion: 3.54 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, HF, HCL and phosgene gas.

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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:

- (X) 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:

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

EYE PROTECTION:

- (X) 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.....	1.19	pH.....	NA
Boiling Point.....	30C / 86F	% Volatile.....	100
Freezing Point.....	NIF	% Solids.....	0
Vapor Density (Air=1):..	4.0	Evaporation Rate (H2O=1)...	>1
Solubility in Water.....	< 5	Viscosity.....	N/A
Molecular Weight.....	N/A	Physical State.....	LIQUID
Non-Exempt VOC (g/l)....	50	Odor.....	NIF

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:

Information not available.

HUMAN EXPERIENCE:

Information not available.

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 Section 12. ECOLOGICAL INFORMATION

FURTHER INFORMATION:

Information not available.

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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.

IMO

Proper Shipping Name: AEROSOLS
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	90-95
Methanol	67-56-1	4-4.5

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: --- No Information ---

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: A, D.1.B and D.2.B

EUROPE EINECS NUMBERS: Dichlorofluoroethane; 1717-00-6, 200-891-8

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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: Skull and Cross Bones Compressed Air

Canadian WHIMS Symbols: NIF

NFPA HAZARD RATING:

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

CONTRACT NUMBER:

F0865194PA934

REVISION DATES, SECTIONS, REVISED BY:

27-JULY-94, CONVERTED TO ANSI STANDARD, B. RIFFEL

02-FEB-96, Updated WHMIS information. B. Riffel

17-JAN-97, UPDATED SHIPPING INFORMATION, R. PRICHARD
09-SEP-97, Updated WHMIS information, B. Riffel
25-MAY-00, Reviewed, B. Riffel

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

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