

# MATERIAL SAFETY DATA SHEET

## **SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION**

Date Prepared: 04-19-13

Product Identifier: **A+ Electrical Contact Cleaner**

Manufacturers Part #RT620A

General Use: Aerosol Solvent

Chemical Family: Fluorocarbon Solvent

Manufacturer Refrigeration Technologies (www.refrigtech.com)

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## **SECTION 2 - HAZARDOUS INGREDIENTS**

Hazardous Components	CAS#	WEIGHT %	TWA	STEL	PEL	EINECS#
1,1,1,2 Tetrafluoroethane	811-97-2	20	NE	NE	NE	212-377-0
1,1,1,3,3 Pentafluoropropane	460-73-1	60	NE	NE	NE	419-170-6
Fluorocarbon Solvent N.O.S	NA	20	NE	NE	NE	NA

RISK PHRASE: R20 Harmful if Inhaled; R38 Irritating to Skin; R36 Irritating to Eyes. SAFETY PHRASE: 1/2/23/24/25

## **SECTION 3 - HAZARDOUS IDENTIFICATION**

HMIS: H=1, F=0, R=0, S=0

Emergency Overview: CAUTION: Contents under pressure. All components reduce oxygen available for breathing.

Asphyxiation can occur in moderate to high concentrations. Avoid breathing vapors. Avoid contact with eyes and skin.

Container will explode if heated.

Potential Health Effects:

EYES: Irritant, cold burning sensation.

SKIN: Cold, Freezing Irritant, mild to severe frost bite.

INGESTION: Unlikely due to low boiling point but toxic if intentionally consumed.

INHALATION: Asphyxiation in moderate to high concentrations or if intentionally inhaled. Can cause nasal and respiratory irritation, headache, dizziness and central nervous system damage

Carcinogenic: No NTP? No IARC Monographs? No OSHA Regulated? Yes

## **SECTION 4 - FIRST AID MEASURES:**

EYES: Remove contact lens. Flush with warm water for 15 minutes. If irritation persists, call physician

SKIN: Warm water rinse. Wash with soap and water. If irritation persists, call physician

INGESTION: Drink large amounts of water. Do not induce vomiting. Call physician immediately.

INHALATION: Get person to fresh air. Provide oxygen/artificial respiration. Call physician immediately.

## **SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

NFPA Hazard Rating: H=1, F=0, R=0, S=0

Flash Point: None Flammable Limits: Not Tested LEL: Not Tested UEL: Not Tested

Extinguishing Media: Water, CO2 or Dry Foam Special Fire Fighting Procedures: Self contained breathing apparatus.

Unusual Fire and Explosion Hazards: Can may burst upon heating and become projectiles.

Hazardous Combustion Products: Hydrogen Fluoride.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Work Hygenic Practices: Use common sense around chemicals. Never mix chemicals. Consult your supervisor for other practices. All practices depend on your specific business. Follow directions for use on label.

Steps to be taken in case material is released or spilled: This is a fast evaporating liquid. Evacuate the area and remove materials outdoor.

Contain liquid and transfer to a closable container if possible. Keep away from heat or open flame. Dispose of in accordance with federal, state and local regulations.

## **SECTION 7 - HANDLING AND STORAGE**

Precautions to be taken in handling and storing: CAUTION: Contents under pressure. Avoid breathing vapors. Store in a cool dry place out of direct sunlight. Do not freeze or heat above 120 F. Keep container away from open flame. Use with adequate ventilation. Avoid contact with eyes. Other precautions: KEEP OUT OF REACH OF CHILDREN

## **SECTION 8 - EXPOSURE/CONTROL MEASURES**

Hazardous Component	NIOSH TWA/STEL	ACGIH TWA/STEL
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1,1,1,2 Tetrafluoroethane	NE	NE
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1,1,1,3,3 Pentafluoropropane	NE	NE
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Respiratory Protection: Open all doors and windows. If there is an exposure and it is above the TLV or PEL, a NIOSH approved respirator equipped for the exposure or suitable respiratory protection per 29 CFR 1910.134 is required.

Ventilation: Local Exhaust: If available Special: None

Mechanical: If available Other: None

Protective Gloves: Plastic or Rubber, Chemical Resistant. Eye Protection: Glasses, Goggle

Other Protective Clothing or Equipment: None

**PAGE 2: MSDS A+ Electrical Contact Cleaner, #RT620A**

**SECTION 9 - PHYSICAL/CHEMICAL PROPERTIES**

Boiling Point >60F/15C Specific Gravity: 1.31

Vapor Pressure: 60-70 psia pH: NA

Vapor Density: Heavier than air Evaporation Rate: Greater than 1

Solubility in Water: Insoluble Appearance and Odor: Clear liquid, ether like odor

**SECTION 10 - STABILITY AND REACTIVITY**

Stability: Stable

Conditions to Avoid: Temperatures above 120F/50C. Open flame

Incompatible Materials to Avoid: Strong alkali or earth metals

Hazardous Decomposition or Byproducts: Hydrogen Fluoride

Hazardous Polymerization: Will not occur

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Hazardous Components	CAS#	EINECS#	LC50 Inhaled	LD50 oral	LD50 dermal
1,1,1,2 Tetrafluoroethane	811-97-2	212-377-0	NE	NA	NA
1,1,1,3,3 Pentafluoropropane	460-73-1	419-170-6	NE	NA	NA

All components reduce oxygen available for breathing. Asphyxiation can occur. Avoid contact with eyes and skin.

**SECTION 12 - ECOLOGICAL INFORMATION**

None of the components are known to have aquatic toxicity or negative environmental impact. Components are in compliance with current international ozone depletion and/or global warming regulations.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Always follow Federal, State and Local codes before disposal of any chemicals. Consult with an expert in your area on proper disposal methods. Chemicals should never be allowed to enter sewers, watercourses or low areas without proper authorization.

Empty containers should be thoroughly rinsed and offered for recycling.

**SECTION 14 - TRANSPORTATION INFORMATION**

DOT: Aerosol, Level 1 Proper Shipping Name: Consumer Commodity Class: ORM-D UN# None

IMDG: Aerosol Proper Shipping Name: Aerosols Limited Quantity Class: 2.2 UN# 1950

Label: Non-Flammable Gas Marine Pollutant: No

IATA: Forbidden to ship by Air unless packaged by Certified Hazmat Packager

**SECTION 15 - REGULATORY INFORMATION**

SARA/CERCLA/311: No reportable ingredients. Not subject to any special reporting.

TSCA: Components are listed on the TSCA Inventory

EINECS: Yes, 212-377-0, 419-170-6

ADR: UN 1950, Class 2.2, non flammable, Hazchem Code 2Y, ERG No. 49, Aerosols

CALIFORNIA PROP 65: No reportable ingredients

CPR: Ingredients Listed: "This product MSDS contains all the information required by the CPR."

IDL: Yes, as listed in Section 2 of this MSDS

DSL/NDSL: All Ingredients Present

RISK PHRASE: R20 Harmful if Inhaled; R38 Irritating to Skin; R36 Irritating to Eyes

SAFETY PHRASE: 1/2/23/24/25

WHIMIS STATUS: Class A (Compressed Gas)



Symbol:

VOC Content: 200 grams/liter

**SECTION 16 - OTHER INFORMATION**

NSF Registration Number 120059, Non-Food Compound, Category K2

Product may be used around food and on food equipment as per NSF Category K2.

Manufacturer Disclaimer: This information relates to the specific materials designated herein and may not be valid for such materials used in combination with any other material. The information contained in this document is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information.

Date Prepared: 04-19-13

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