

MATERIAL SAFETY DATA SHEET: OSHA STANDARD 29 CFR 1910.1200

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Date: 11-01-05

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

Manufacturers Part # RT620A

General Use: Electrical Cleaning/Degreasing Compound

Chemical Family: Fluorinated Solvent

Manufacturer

Refrigeration Technologies (www.refrigtech.com)

2572 Fender Ave Bldg "C"

Fullerton, CA92831

(800) 869-1407, 714-870-8361

Fax: 714-526-4598

24 HR Emergency Phones (800) 255-3924 Chem-Tel, Inc.

International: 813.248.0585

HAZARDOUS IDENTIFICATION

Hazardous Components	CAS#	OSHA PEL	ACHIH	TLV	WEIGHT %
1,1,1,3,3 Pentafluoropropane	460-73-1	N/A	N/A		90
1,1,1,2 Tetrafluoroethane	811-97-2	N/A	N/A		10

HEALTH HAZARD DATA

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

Immediate Concerns: CAUTION, Contents Under Pressure. Eye Irritation. Skin Irritation/Freeze/Burn

Eyes: Irritant

Skin: Cold Irritant, mild to severe

Ingestion: Toxic, gastric tract disorder and/or damage.

Inhalation: Nasal and respiratory irritation, headache, dizziness

Signs and Symptoms of Overexposure:

Eyes: Burning Sensation

Skin: Frost Bite

Ingestion: Nausea, vomiting, diarrhea and other toxic effects.

Inhalation: Feeling of euphoria, weakness, dizziness, nausea, headache, possible unconsciousness due to lack of available oxygen. Excessive inhalation of Refrigerant gas targets CNS, respiratory system and increases heart rate.

Emergency and First Aid Procedures:

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

Skin: Warm water rinse. If irritation persists seek medical attention.

Ingestion: Drink large amounts of water. DO NOT induce vomiting. Call physician immediately.

Inhalation: Get person to fresh air. Provide oxygen/artificial respiration if unconscious or not breathing. Call physician

FIRE AND EXPLOSION HAZARD DATA

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

Flash Point: None

Flammable Limits: Not Tested

LEL: Not Tested

UEL: Not Tested

Extinguishing Media: Water, CO2, DRY FOAM

Special Fire Fighting Procedures: Self contained breathing apparatus is recommended. Use water to cool containers.

Unusual Fire and Explosion Hazards: Cans will burst upon heating and become projectiles.

ACCIDENTAL RELEASE MEASURES

Steps to be taken in case material is released or spilled: This is a fast evaporating liquid. Evacuate the area and remove materials outdoor. Keep away from heat or open flame. Contain liquid and transfer to a closable container, if possible.

HANDLING AND STORAGE

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

EXPOSURE/CONTROL MEASURES

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, Goggles

Other Protective Clothing or Equipment: None

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Work Hygienic Practices: Use common sense and care around chemicals. Never mix chemicals. Consult your supervisor for other practices. All practices depend on your specific business.

PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: ~ 60 F	Weight per Gallon: 10.42 lb
Vapor Pressure: 60-70 psi	Melting Point: Not Tested
Vapor Density: Heavier than Air	Evaporation Rate: Greater than 1
Solubility in Water: Slight	Appearance and Odor: Clear liquid, ether like odor

STABILITY AND REACTIVITY

Stability: Stable
Conditions to Avoid: Temperatures above 120 F. Open flame.
Incompatible Materials to Avoid: Strong alkali or earth metals
Hazardous Decomposition or Byproducts: Hydrogen Fluoride, CO, CO2
Hazardous Polymerization: Will not occur

TOXICOLOGICAL INFORMATION

Possible effects of exposure are:
Eyes: Mild to severe eye irritation
Skin: Slight irritant to Frost bite
Skin Absorption: None to Slight
Inhalation: Excessive or repeated inhalation of vapors is toxic.
Ingestion: Can cause gastrointestinal distress/irritation
Chronic Effects: None known at this time.

ECOLOGICAL INFORMATION

Product is composed of SNAP approved, non ozone depleting gases.

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.

TRANSPORTATION INFORMATION

DOT: Aerosol, Level 1, Non-flammable
Proper Shipping Name: Consumer Commodity Class: ORM-D
IMDG: Aerosol
Proper Shipping Name: Aerosols Class: 2 UN No. 1950 Label: N/A
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IATA: Aerosol
Proper Shipping Name: Aerosols, non-flammable Class: 2.2 UN No. 1950 Label: Non-Flammable Gas
Packaging Instruction: 910

REGULATORY INFORMATION

SARA Title III 313: No reportable ingredients.
CERCLA: Not subject to any special reporting.
TSCA: Components are listed on the TSCA Inventory
EPA RQ Ingredient: None
California Prop 65: No reportable ingredients
VOC Content: 0 grams/liter

OTHER INFORMATION

NSF Registration Number 120059, Category K2

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Refrigeration Technologies