

ELF ATOCHEM NORTH AMERICA INC FINE CHEMICALS -- 04022-004 FORANE 22 --  
6830-00-935-9896

===== Product Identification =====

Product ID:04022-004 FORANE 22

MSDS Date:02/13/1996

FSC:6830

NIIN:00-935-9896

MSDS Number: BRSTW

=== Responsible Party ===

Company Name:ELF ATOCHEM NORTH AMERICA INC FINE CHEMICALS

Address:2000 MARKET STREET

City:PHILADELPHIA

State:PA

ZIP:19103-3222

Country:US

Info Phone Num:8

00-558-5575 FAX 215-419-7413

Emergency Phone Num:800-558-5575 716-877-1740

Preparer's Name:PRODUCT SAFETY

CAGE:86460

=== Contractor Identification ===

Company Name:ATOACHEM NORTH AMERICA INC

Address:3 PARKWAY RM 910

Box:City:PHILADELPHIA

State:PA

ZIP:19102

Country:US

Phone:215-587-7197

CAGE:0N628

Company Name:ELF ATOCHEM NORTH AMERICA INC

Address:2000 MARKET STREET

Box:City:PHILADELPHIA

State:PA

ZIP:19103-3222

Country:US

Phone:800-245-5858

CAGE:86460

Company Name:REFRIGERATION SALES CO INC

Addr

ess:38-18 33RD ST  
Box:City:LONG ISLAND CITY  
State:NY  
ZIP:11101-2211  
Country:US  
Phone:800-221-0603  
CAGE:3A676

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Composition/Information on Ingredients  
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Ingred Name:CHLORODIFLUOROMETHANE (SARA 313) (CERCLA)  
CAS:75-45-6  
RTECS #:PA6390000  
Fraction by Wt: 100%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1000 PPM  
ACGIH TLV:1000 PPM; 9596  
Ozone Depleting Chemical:2

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Hazards Identification  
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LD50 LC50 Mixture:TLV= 1000 PPM (3450 MG  
/M3)

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: INHALATION OF HIGH

CONCENTRATIONS IN ENCLOSED OR CONFINED AREAS MAY CAUSE RESPIRATORY  
DEPRESSION, ASPHYXIA DUE TO OXYGEN DISPLACEMENT; INCREASES  
SENSITIVITY TO ADRENALIN. CONTACT WITH EYES MAY CAUSE IRRITATION.  
SKIN CONTACT WITH LIQUID MAY CAUSE FROSTBITE. CHRONIC: NONE  
SPECIFIED BY MANUFACTURER.

Explanation of Carcinogenic

ity:NO INGREDIENT OF A CONCENTRATION OF 0.1%

OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Effects of Overexposure:INHALED-DROWSINESS, UNCONSCIOUSNESS,  
RESPIRATORY DEPRESSION, DEATH; RAPID HEARTBEAT (TACHYCARDIA),  
IRREGULAR HEARTBEAT (CARDIAC ARRYTHMIAS), AND DEPRESSED CARDIAC  
FUNCTION. EYES- IRRITATION, FROZEN EYE TISSUE. SKIN-FROZEN SKIN  
TISSUE/FROSTBITE.

Medical Cond Aggravated by Exposure:PERSONS WITH PREEXISTING HEART  
DISEASE MAY BE AT INCREASED RISK

FROM EXPOSURE.

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===== First Aid Measures =====

First Aid:SKIN-FLUSH SKIN WITH WARM WATER. GET MEDICAL ATTENTION IF FROSTBITTEN OR IF SYMPTOMS OCCUR. EYES-FLUSH WITH LOTS OF WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. INHALED-REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING DIFFICULT. GET MEDICAL ATTENTION.

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===== Fire Fighting Measures =====

Flash Point

:NON-FLAMMABLE

Autoignition Temp:Autoignition Temp Text:1170F

Extinguishing Media:USE MEDIA APPROPRIATE FOR SURROUNDING FIRE.

Fire Fighting Procedures:WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE GEAR. THOROUGHLY DECONTAMINATE FIREFIGHTERS GEAR AFTER USE.

Unusual Fire/Explosion Hazard:MAY DECOMPOSE DURING CONTACT W/FLAMES, HEATING ELEMENTS OR IN COMBUSTION ENGINES RELEASING IRRITATING,TOXIC & CORROSIVE GASES.CONTAINER MAY EXPLODE IF HEATED.

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===== Accidental Release Measures =====

Spill Release Procedures:KEEP UPWIND. EVACUATE ENCLOSED SPACE. ELIMINATE ALL SOURCES OF IGNITION. STOP LEAK IF FEASIBLE. DISPERSE GAS WITH FLOOR-LEVEL FORCED VENTILATION; EXHAUST GAS OUTDOORS. WASH CONTAMINATED CLOTHES BEFORE REUSE. DESTROY CONTAMINATED SHOES.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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===== Handling and Storage =====

Handling and Storage Precautions:STORE IN TIGHTLY CLOSED CONTAINERS.

KEEP CONTAINER CLOSED. KEEP AWAY FROM HEAT, SPARKS AND FLAMES. EMPTY CONTAINER MAY CONTAIN HAZARDOUS RESIDUES.

Other Precautions:DO NOT DROP, REUSE OR REFILL CONTAINER. DO NOT SMOKE. READ LABEL BEFORE USE. DO NOT CUT, GRIND, OR WELD ON OR NEAR CONTAINER DUE TO POSSIBLE FUME GENERATION.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH

APPROVED AIR-SUPPLIED

RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910.134 AND MANUFACTURE R'S RECOMMENDATIONS.

Ventilation:USE ADEQUATE MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves:LINED SYNTHETIC RUBBER.

Eye Protection:CHEMICAL SPLASH GOGGLES.

Other Protective Equipment:PROTECT ALL EXPOSED SKIN FROM CONTACT WITH LIQUID.

Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKIN

G. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

NONE

===== Physical/Chemical Properties =====

HCC:G3

Boiling Pt:B.P. Text:-41F,-41C

Melt/Freeze Pt:M.P/F.P Text:-256F,-160C

Vapor Pres:7031 MM HG

Vapor Density:2.98

Spec Gravity:1.17

Evaporation Rate & Reference:NONE SPECIFIED BY MFR.

Solubility in Water:SLIGHT

Appearance and Odor:COLORLESS, LIQUIFIED GAS; FAINT ETHEREAL ODOR.

Percent Volatiles by Volume:100

===== Stabilit  
y and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG ALKALIS, ALKALIE EARTH METALS, FINELY POWDERED METALS AND STRONG OXIDIZING AGENTS.

Stability Condition to Avoid:THERMAL DECOMPOSITION.

Hazardous Decomposition Products:THERMAL DECOMPOSITION PRODUCTS INCLUDE HYDROGEN FLUORIDE, HYDROGEN CHLORIDE, CARBON MONOXIDE, CARBON DIOXIDE, CHLORINE.

===== Disposal Considerations =====

Waste Disposal Methods:RECYCLE OR RECL

AIM IF POSSIBLE. RECLAIMED

MATERIAL MAY BE INCINERATED BUT TOXIC AND CORROSIVE COMBUSTION PRODUCTS (HF & HCL) MUST BE HANDLED APPROPRIATELY. CONSULT LOCAL, STATE AND FEDERAL AUTHORITIES FOR PROPER DISPOSAL PROCEDURES.

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