

ELF ATOCHEM NORTH AMERICA INC -- FORANE 134A -- 6830-01-370-6207

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

Product ID:FORANE 134A

MSDS Date:10/13/1992

FSC:6830

NIIN:01-370-6207

MSDS Number: BWZNV

=== Responsible Party ===

Company Name:ELF ATOCHEM NORTH AMERICA INC

Address:THREE PARKWAY 908

City:PHILADELPHIA

State:PA

ZIP:19102-1321

Country:US

Info Phone Num:215-587-7513/7779

Emergency Phone Num:215-587-7513/7779

CAGE:86460

=== Contractor Identification ===

Company Nam

e: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

===== Composition/Information on Ingredients =====

Ingred Name:1,1,1,2-TETRAFLUOROETHANE (R134A)

CAS:811-97-2

Fraction by Wt: 100%

===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute an

d Chronic:EYES: VERY SLIGHT IRRITANT. RAPID  
VOLATILIZATION OF LIQUID MAY CAUSE FROSTBITE. SKIN: SLIGHT  
IRRITANT, CONTACT MAY CAUSE FROSTBITE. INHALATION: CONCENTRATED  
VAPORS CAN CAUSE RESPIRATORY DEPRESSION, INCREASES SENSITIVITY OF  
THE HEART TO ADRENALINE, DEPRESSION OF CARDIAC FUNCTION, DEATH DUE  
TO ASPHYXIATION.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:IRRITANT, DROWSINESS, UNCONSCIOUSNESS, RAPID  
HEARTBEAT, IRREGULAR HEARTBEAT.

Medical Condition Aggravated

by Exposure:PREEXISTING HEART DISEASE.

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

First Aid:SKIN: IF FROSTBITTEN, WARM SLOWLY W/WATER. FLUSH W/PLENTY OF  
WATER. EYES: FLUSH W/PLENTY OF CLEAN WATER FOR 15 MINS. INHALATION:  
REMOVE TO FRESH AIR. IF NOT BREATHING, GIVE CPR. IF BREATHING IS  
DIFFICULT, GIVE OXYGEN. INGESTION: NEVER GIVE ANYTHING BY MOUTH TO  
AN UNCONSCIOUS PERSON. OBTAIN MEDICAL ATTENTION IN ALL CASES.

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

Flash Point:NONFLAMMABLE

Extinguishing Media:USE EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING  
FIRE.

Fire Fighting Procedures:WEAR SCBA. KEEP CONTAINERS COOL.

Unusual Fire/Explosion Hazard:CONTAINER MAY EXPLODE IF HEATED DUE TO  
RESULTING PRESSURE RISE.

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

Spill Release Procedures:REMOVE/EXTINGUISH IGNITION/COMBUSTION SOURCES.  
EVACUATE ENCLOSED SPACES UNTIL GAS IS DISPERSED. KEEP UPWIND.  
D. STOP

LEAK IF POSSIBLE W/OUT RISK. DISPERSE GAS W/FLOOR-LEVEL FORCED-AIR  
VENTILATION. EXHAUST VAPORS OUTDOORS. REMOVE FLAMES/HEAT

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

Handling and Storage Precautions:KEEP CONTAINER CLOSED. KEEP AWAY FROM  
IGNITION SOURCES. STORE IN TIGHTLY CLOSED CONTAINERS. EMPTY  
CONTAINERS CONTAIN HAZARDOUS RESIDUE.

Other Precautions:DON'T DROP, REUSE/REFILL CONTAINER. DON'T CUT, GRIND/  
WELD ON/NEAR CONTAINER. DON'T GET IN

EYES, ON SKIN/CLOTHING. DON'T  
BREATHE VAPOR, MIST/GAS.

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

Respiratory Protection:IN INADEQUATELY VENTILATED AREAS, A NIOSH/MSHA  
APPROVED (TC-18C) SUPPLIED AIR RESPIRATOR/SCBA IS RESQUIRED.

Ventilation:CHECK AIR FOR CONTAMINANT & FOR OXYGEN DEFICIENCY. USE  
LOCAL EXHAUST SYSTEM IF VENTILATION IS INADEQUATE.

Protective Gloves:SYNTHETIC RUBBER/NEOPRENE

Eye Protection:GOGGLES

Other Protective Equipment:LIQUID GLOVES ARE RE  
COMMENDED FOR PROTECTION  
FROM COLD.

Work Hygienic Practices:REMOVE/LAUNDER CONTAMINATED CLOTHING BEFORE  
REUSE. DESTROY CONTAMINATED SHOES.

Supplemental Safety and Health

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

HCC:G3

Boiling Pt:B.P. Text:-16F,-26C

Melt/Freeze Pt:M.P/F.P Text:-150F,-101C

Vapor Pres:96.16

Vapor Density:3.52

Spec Gravity:1.21

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR, COLORLESS LIQUIFIED GAS W/FAINT ETHEREAL  
ODOR

Percent Vol

atiles by Volume:100

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

STRONG ALKALIE/ALKALINE EARTH METALS, ALUMINUM, MAGNESIUM/ZINC & STRONG  
OXIDIZERS

Stability Condition to Avoid:FLAMES, HEATING ELEMENTS, TEMP >800F, HOT  
METAL SURFACES, COMBUSTION ENGINES & OTHER IGNITION SOURCES

Hazardous Decomposition Products:HYDROGEN FLUORIDE, CO, CO2,  
HYDROCHLORIC ACID

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

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Waste Disposal Methods:RECYCLE/RECLAIM IF POSSIBLE. RECLAIMED MATERIAL MAY BE INCINERATED BUT TOXIC & CORROSIVE COMBUSTION PRODUCTS MUST BE HANDLED APPROPRIATELY. DISPOSE OF IAW/LOCAL, STATE & FEDERAL REGULATIONS.

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