

RACON INC -- REFRIGERANT 11, FREON 11 (SEE SUPP DATA) -- 4940-00-825-0198

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

Product ID:REFRIGERANT 11, FREON 11 (SEE SUPP DATA)

MSDS Date:04/07/1989

FSC:4940

NIIN:00-825-0198

MSDS Number: BJFPZ

=== Responsible Party ===

Company Name:RACON INC

Address:6040 S RIDGE RD

City:WICHITA

State:KS

ZIP:67201

Country:US

Info Phone Num:800-835-2916 316-835-2916

Emergency Phon

e Num:415-821-5338

CAGE:FO608

=== Contractor Identification ===

Company Name:ELF ATOCHEM NORTH AMERICA (FORMERLY RACON INC)

Address:6040 S RIDGE RD

Box:198

City:WICHITA

State:KS

ZIP:67201

Country:US

Phone:CALL COLLECT 415-821-5338

CAGE:2A580

Company Name:GENERAL ELECTRIC CO,INSTRUMENT PRODUCTS OPNS

Address:50 FORDHAM RD

Box:City:WILMINGTON

State:MA

ZIP:01887-2146

Country:US

Phone:617-937-4101

CAGE:97424

Company Name:RACON INC

Box:198

City:WICHITA

State:KS

ZIP:67201

Phone:(415) 821-5338

CAGE:FO60

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Company Name:YOKOGAWA ELECTROFACT BV  
Address:3800 AD, RADIUMWEG 30  
Box:City:AMERSFOORT THE NETHERLANDS  
Phone:404-253-7000  
CAGE:60336

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

Ingred Name:TRICHLOROFLUOROMETHANE (CFC-11) (SARA III)  
CAS:75-69-4  
RTECS #:PB6125000  
Fraction by Wt: 100%  
OSHA PEL:1000 PPM  
ACGIH TLV:C, 1000 PPM; 9293  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS  
Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:LC50(RAT)150,000PPM;(RBT)250,000PPM  
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:INHALE:RELATIVELY NON-TOXIC FOLLOWING  
ACUTE EXPOSURE. CARDIOVASCULAR AND RESPIRATORY SYSTEMS ARE THE  
PRIMARY SYSTEMS AFFECTED. AT HIGH CONC, SERIOUS & SOMETIMES FATAL  
IRREGULAR HEART BEATS. NOTE:SNIFF ING FOR INTOXICATING EFFECTS HAS  
PRODUCED OVER 100 DEATHS.  
Explanation of Carcinogenicit  
y:NOT RELEVANT  
Effects of Overexposure:INHALE:EXPOSURE TO LARGE SPILL, EXPERIENCE  
VARYING NARCOTIC EFFECTS INCLUDING UNCONSCIOUSNESS,RAPID HEART  
BEAT. EYES:MILD IRRITATION OF THE MUCOUS MEMBRANES.  
Medical Cond Aggravated by Exposure:CARDIOVASCULAR AND RESPIRATORY  
SYSTEMS ARE THE PRIMARY SYSTEMS AFFECTED. (MFR)

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

First Aid:INHALE:REMOVE TO FRESH AIR. KEEP WARM & AT REST. IF BRTHNG  
DFCLT GIVE OXYGEN. IF NOT BRTHNG

GIVE CPR. DO NOT GIVE STIMULANTS.  
CALL MD. EYES:(VAPOR)FLUSH W/WATER FOR 20 MIN. (LIQ)FLUSH THOROUGHLY 10-15 MIN W/LUKEWARM WATER/BALANCED SALINE SOLN. GET MD. SKIN:(LIQ)WILL REMOVE NATURAL OILS AND CAN IRRITATE DRY,SENSITIVE SKIN. INGEST:(LIQ)IRRITATION TO GASTRIC OR DIGESTIVE TRACTS IN LGE QUANT. GET MD.

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

Extinguishing Media:NONFLAMMABLE AND NONEXPLOSIVE.  
Fire Fighting Procedures:USE NIOSH/MSHA APPROVED SCBA AND FULL PROTECTIVE EQUIPMENT .  
Unusual Fire/Explosion Hazard:THERMAL DECOMPOSITION PRODUCTS MAY INCLUDE HCL AND PHOSGENE .

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

Spill Release Procedures:KEEP UPWIND. VENTILATE ENCLOSED SPACES UNTIL GAS IS DISPERSED. DO NOT SMOKE OR OPERATE INTERNAL COMBUSTION ENGINES IN IMMEDIATE VICINITY.  
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE W/ADEQ VENT IN COOL PLACE.NEVER USE IN CLSED/CONFINED SPACE.DO NOT USE NEAR ARC WELDING,OPEN FLAMES OR HOT SURFACES. SEE OTHER PRECAUTIONS.  
Other Precautions:HNDLNG/STOR:HEAT OR UV RADIATION MAY CAUSE FORMATION OF HCL AND/OR PHOSGENE.

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

Respiratory Protection:RESP PROTECTION IS NOT NEEDED IF CONC ARE CONTROLLED. IF CONC EXCEED TLV(1,000PPM) USE NIOSH/MSHA AN APPROVED RE SPIRATOR FOR ORGANIC VAPOR. IN VERY HIGH CONC USE SCBA.  
Ventilation:LOCAL EXHAUST MAY BE NECESSARY TO REDUCE CONCENTRATIONS BELOW TLV(1,000PPM)  
Protective Gloves:USE CLOTH-LINED RUBBER GLOVES.  
Eye Protection:USE CHEMICAL GOGGLES & FULL FACE SHIELD.  
Other Protective Equipment:PROTECTIVE CLOTHING SHOULD MINIMIZE EXPOSED SKIN.  
Work Hygienic Practices:NO SMOKING IN AREA OF USE.  
Supplemental Safety and Health  
DO NOT BREATHE VAPORS. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. NOT FOR FOOD

, DRUG OR COSMETIC USE. TRADE NAME (CON'T):GENETRON 11,  
FLUOROCARBON 11, CFC-11, R-11.

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

HCC:N1

Boiling Pt:B.P. Text:74.9F 23.8C

Vapor Pres:.6PSIG@77F

Vapor Density:.39 16/FT3

Spec Gravity:1.48 @ 77F

Solubility in Water:INSOLUBLE

Appearance and Odor:COLORLESS LIQUID, VERY SLIGHT ETHEREAL TO ODORLESS.

Percent Volatiles by Volume:100

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

Stability Indicator/Mat

erials to Avoid:YES

AVOID CERTAIN ELASTOMERS, ALKALI AND ALKALINE EARTH METALS,POWDERED  
ALUMINUM, ZINC, BERYLLIUM.

Stability Condition to Avoid:CONTACT W/OPEN FLAMES OR EXTREMELY HOT  
METAL SURFACES AS PROD MAY DECOMPOSE TO FORM HF,HCI & TRACES OF  
CARBONYL HALIDES.

Hazardous Decomposition Products:CONTACT WITH OPEN FLAME OR HOT METAL  
SURFACES, MAY DECOMPOSE TO FORM HF,HCI & TRACES OF CARBONYL HALIDES  
AND/OR PHOSGENE

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

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Waste Disposal Methods:DISPOSE OF I/A/W FEDERAL, STATE AND LOCAL  
REGULATIONS. .

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