

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 Phone 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:FO608

Company Name:YOKOGAWA ELECTROFACT BV

Address:3800 AD, RADIUMWE

G 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 Carcinogenicity: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)FLUS

H 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
RESPIRATOR FOR ORGANIC VAPOR. IN VERY HIGH CONC USE SCBA.

Ventilat
ion: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,
FLUO

ROCARBON 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/Materials to Avoid:YES

AVOID CERTAIN ELASTOMERS, ALKALI AND ALKALIN

E 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 =====

Waste Disposal Methods:DISPOSE OF I/A/W FEDERAL, STATE

AND LOCAL

REGULATIONS. .

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