

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

8
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 =====

=====

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

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify a
nd

assume responsibility for the suitability of this information to their
particular situation.