

ALLIED-SIGNAL INC, ENGINEERED MATERIALS SECTOR -- GENETRON 11  
(TRICHLOROFLUOROMETHANE) -- 6830-00-281-3036

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

Product ID:GENETRON 11 (TRICHLOROFLUOROMETHANE)

MSDS Date:02/01/1993

FSC:6830

NIIN:00-281-3036

MSDS Number: BDSXB

=== Responsible Party ===

Company Name:ALLIED-SIGNAL INC, ENGINEERED MATERIALS SECTOR

Box:1139R

City:MORRISTOWN

State:NJ

ZIP:07962-1139

Country

:US

Info Phone Num:800-522-8001

Emergency Phone Num:800-522-8001

CAGE:1L164

=== Contractor Identification ===

Company Name:ALLIED-SIGNAL INC

Box:2332R

City:MORRISTOWN

State:NJ

ZIP:07962-2332

Country:US

Phone:201-455-4414

CAGE:1L164

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

Ingred Name:TRICHLOROFLUOROMETHANE (CFC-11) (SARA 313) (CERCLA)

CAS:75-69-4

RTECS #:PB6125000

Fraction by Wt: 100%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1000 PPM

ACGIH TLV:C 1000 PPM; 9596

EP

A Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS  
Ozone Depleting Chemical:1

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

LD50 LC50 Mixture:LD50 (MOUSE): 1743MG/KG.  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:INHAL:VAP SLIGHTLY IRRIT LUNG.BREATH  
CONC APPROACHING 10% IN AIR CAUSE DIZZ,DIFFI  
BREATH,DROWSINESS,POSSIBLY NARCOSIS.INGEST:UPSET,IRRIT GI  
TRACT.ESTIMATED TO HAVE  
MODERATE TOXICITY.SAME SYMPTOMS AS I  
NHAL.SKIN:EXCESSIVE CONTACT MAY CAUSE IRRIT(DEFAT ACTION),POSSIBLE  
FROSTBITE(REFRIG EFFECT OF EVAPORATION).EYE:LIQ(SUPP)  
Explanation of Carcinogenicity:PER MSDS:A NCL-SPONSORED BIOASSAY ON  
CARCINOGENICITY (RATS) GAVE NEGATIVE RESULTS.  
Effects of Overexposure:SLIGHTLY IRRIT LUNG. DIZZINESS, DIFFICULT  
BREATH, DROWSINESS, NARCOSIS. UPSET, IRRIT GI TRACT. SKIN IRRIT,  
FROSTBITE. YE:IRRIT.  
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MA  
NUFACTURER.

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

First Aid:INHAL:IMMED REMOVE TO FRESH AIR.STOP BREATH GIVE  
MOUTH-TO-MOUTH RESUSC.GIVE OXY BY QUAL PERSON IF AVAILABLE.CALL  
DR.DON'T GIVE ADRENALIN(Epinephrine).EYE:RPROMPTLY FLUSH W/LG AMTS  
OF WATER.LIFT EYELIDS .IRRIT CONSULT DR.SKIN:PROMPTLY WASH  
W/SOAP/WATER THEN FLUSH W/WATER TIL CHEM REMOVED.REMOVE CONTAMIN  
CLOTH.INGEST:UNLIKELY EXPO ROUTE.NOT EXPECTED TO BE HAZ.DO NOT  
INDUCE VOMIT UNLE  
SS INSTRUCTED(SUP)

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

Flash Point:NON-FLAMMABLE  
Autoignition Temp:Autoignition Temp Text:NA  
Lower Limits:NA  
Upper Limits:NA  
Extinguishing Media:ANY STD AGENT.SELECT ONE MOST SUITABLE FOR TYPE OF  
FIRE.MATL ITSELF NOT FLAMMABLE.  
Fire Fighting Procedures:WEAR NIOSH-APPROVED SCBA FOR PROT AGAINST  
SUFFO/POSSIBLE TOXIC DECOMPO PROD.COOL FIRE-EXPO CNTNR/KEEP SPILL  
AWAY FROM FIRE/HEAT/KNOCK DOWN VAP W/WATER SPRAY.  
Unusual Fi

re/Explosion Hazard:NOT COMBUST ITSELF CONTACT W/CERTAIN METALS PRODUCES RAPID EXO RX/POT EXPLO COMBINATINS.

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

Spill Release Procedures:EVACUATE UNPROT PEOPLE.PROT PEOPLE W/SELFCONTAIN AIR SUPLLY RMOEV FLAME/SHUT OFF LEAK/PROVIDE VENTI.ABSORB LIQ W/COMMERCIAL ABSORBENT/SHOVEL INTO METAL DRM/CLS.DIKE LG SPILLS W/INERT MATL/COMM ABSORBE NT/PUMP INTO DR.PUMP NOT OVERHEAT.KEEP OUT OF SEWR

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:AVOID BREATH VAP/LIQ CONTACT W/EYE/SKIN/CLOTH.TANK-CLEAN PEOPLE SHOULD USE ONLY FORMAL TK ENTRY PROCEDURE BASED ON RECOGN SAF PRINCIPLES.

Other Precautions:FOLLOW PRECAUT ON LABEL.STORAGE AREAS CLEAN WELL VENTI AWAY FROM HEAT/DIR SUNLIGHT/LOW FIRE RISK.PROT CNTNR FRM PHY DMG/KEEP CLSD.SPEC ATTN GIVEN TO VENTI OF LOWLYING AREA/SM ENCLSR WHERE MATL S TORE/U SED-AVOID ASHPYXIATION.

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

Respiratory Protection:NONE REQUIRED FOR NORMALLY-VENITED WORK SITUATIONS.FOR ACCIDENTAL OR NON-VENTI SITUATIONS WHERE VAP CONC MAY BE HIGH, USE SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED-AIR RESP, NIOSH-APPROVED.

Ventilation:VENTI SHOULD BE ADEQU TO MEET TLV REQMTS/MIN EXPO TO VAP.LOC EXHAU:@FILL ZONE,WHERE LEAKAGE PROBABLE.MECH:ADEQ STORAGE.

Protective Gloves:PVA, NEOPRENE I MPERVIOUS GLOVES.

Eye Protection:SAFETY GOGG,FACE SHIELD.

Other Protective Equipment:DO NOT WEAR CONTACT LENSES.PROTECTIVE IMPERVIOUS CLOTH(PREFER PVA,NEOPRENE).EYEWASH STATIONS,QUICK DRENCH SHOWER FACILI.

Work Hygienic Practices:WASH CONTAMIN BEF REUSE.

Supplemental Safety and Health

HEALTH HAZ:CONTACT IRRIT.VAP ESTIMATED TO BE MILDLY IRRIT. 1STAID:TO DO SO BY PHYSICIAN.

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

HCC:N1

Boiling Pt:B.P. Text:74.8F,23.8C

Me

It/Freeze Pt:M.P/F.P Text:-168F,-111C

Decomp Temp:Decomp Text:NP

Vapor Pres:13.4 PSIA

Vapor Density:5.06 @30C

Spec Gravity:1.49 @21.1C LIQ

pH:N/DETE

Viscosity:NP

Evaporation Rate & Reference:0.4, ETHER=1

Solubility in Water:0.11 @25C SLIGHT

Appearance and Odor:LIQUID, COLORLESS, WITH FAINT ETHER-LIKE ODOR.

Percent Volatiles by Volume:100

Corrosion Rate:NP

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

Stability Indicator/Materials to Avoid:YES

AL/AL POWDER,GRANULAR BA,

LITHIUM SHAVINGS,CHEM ACTIVE

METALS(NA,K,CA,POWDERED MG,ZN).

Stability Condition to Avoid:FLAMES, LIGHTED CIGARETTES, HOT SPOTS,

WELDING (DECOMPOSES, LIBERATING HAZARDOUS GASES).

Hazardous Decomposition Products:HALOGENS, HALOGEN ACIDS, & POSSIBLY

CARBONYL HALIDES SUCH AS PHOSGENE.

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

Waste Disposal Methods:RQ:5000.PROD USED AS SOLVNT SUBJ TO  
FED/STATE/LOC REGS WHEN DISPO(EPA SPENT HALOGENATED  
SOLVNT-F001,F002

).UNUSED U121.USERS SHOULD REVIEW OPERATIONS IN  
TERMS OF APPLICABLE FED/STATE/LOC LAW/REG.CONSU L T APPROP REG  
AGENCIES BEF DISCHAR/DISPO.DESTROY O3

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