

POLAR R12 Freon

ALLIED-SIGNAL ENGINEERED MATERIALS SECTOR -- GENETRON 12 DICHLORODIFLUOROMETHANE -
 MATERIAL SAFETY DATA SHEET
 NSN: 6830001061656
 Manufacturer's CAGE: 1L164
 Part No. Indicator: A
 Part Number/Trade Name: GENETRON 12 DICHLORODIFLUOROMETHANE

 General Information

Item Name: DICHLORODIFLUOROMETHANE, TECHNICAL
 Company's Name: ALLIED-SIGNAL INC, ENGINEERED MATERIALS SECTOR
 Company's Street: 101 COLUMBIA ROAD
 Company's P. O. Box: 1053
 Company's City: MORRISTOWN
 Company's State: NJ
 Company's Country: US
 Company's Zip Code: 07962
 Company's Emerg Ph #: 201-455-2000
 Company's Info Ph #: 201-455-4157
 Record No. For Safety Entry: 004
 Tot Safety Entries This Stk#: 017
 Status: SE
 Date MSDS Prepared: 01SEP94
 Safety Data Review Date: 08NOV96
 Supply Item Manager: CX
 MSDS Preparer's Name: UNKNOWN
 Preparer's Company: (MSDS#:GTRN-0018)
 MSDS Serial Number: BCYVV
 Specification Number: BB-F-1421
 Spec Type, Grade, Class: 12 TYPE
 Hazard Characteristic Code: G3
 Unit Of Issue: CY
 Unit Of Issue Container Qty: 50 LBS
 Type Of Container: CYLINDER
 Net Unit Weight: 50 LBS

 Ingredients/Identity Information

Proprietary: NO
 Ingredient: DICHLORODIFLUOROMETHANE (SARA 313) (CERCLA)
 Ingredient Sequence Number: 01
 Percent: 100
 NIOSH (RTECS) Number: PA8200000
 CAS Number: 75-71-8
 OSHA PEL: 1000 PPM
 ACGIH TLV: 1000 PPM; 9596
 Other Recommended Limit: NONE RECOMMENDED

 Physical/Chemical Characteristics

Appearance And Odor: CLEAR COLORLESS LIQUID/VAPOR, GAS @NORMAL TEMP, FAINT
 ETHEREAL ODOR.
 Boiling Point: -22F, -30C
 Melting Point: -252F, -158C
 Vapor Pressure (MM Hg/70 F): 84.9 @70F
 Vapor Density (Air=1): 4.2
 Specific Gravity: 1.34 @30C
 Decomposition Temperature: NP
 Evaporation Rate And Ref: >1 COMPARED TO CCL4.
 Solubility In Water: UNKNOWN.
 Percent Volatiles By Volume: 100
 Viscosity: NP
 pH: NEUTRA

Corrosion Rate (IPY): NP

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 Fire and Explosion Hazard Data
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Flash Point: NO FLASH POINT
 Flash Point Method: TOC
 Lower Explosive Limit: NA
 Upper Explosive Limit: NA
 Extinguishing Media: USE ANY STD AGENT-CHOOSE ONE MOST APPROPRIATE FOR TYPE OF SURROUNDING FIRE (MAY ITSELF NOT FLAMMABLE).
 Special Fire Fighting Proc: WEAR NIOSH-APPROVE SCBA FOR PROT AGAINST POSSIBLE TOX DECOMPO PROD. PROPER EYE/SKIN PROT SHOULD BE PROVIDED. WATERSPRAY TO KEEP FIRE-EXPO CNTNR COOL/SUPPRESS VAP.
 Unusual Fire And Expl Hazrds: CONTACT W/CERTAIN REACTIVE METALS MAY RESULT IN FORMATION OF EXPLO/EXO RX UNDER SPECIFIC CONDITIONS (EF VERY HI TEMP &/OR APPROPRIATE PRESSURE).

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 Reactivity Data
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Stability: YES
 Cond To Avoid (Stability): SOURCES OF IGN. MAY YIELD TOXIC &/OR CORR DECOMPO PROD. AVOID MIX W/AIR/OXY ABOVE ATM PRESSURE.
 Materials To Avoid: FRESHLY ABRADED AL SURFACES, CHEMICAL ACTIVE METALS: NA, K, CA, POWDERED AL, MG, ZN.
 Hazardous Decomp Products: HALOGENS, HALOGEN ACIDS & POSSIBLY CARBONYL HALIDES. THESE ARE TOXIC & CORROSIVE.
 Hazardous Poly Occur: NO
 Conditions To Avoid (Poly): NOT APPLICABLE

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 Health Hazard Data
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LD50-LC50 Mixture: NONE SPECIFIED BY MANUFACTURER.
 Route Of Entry - Inhalation: YES
 Route Of Entry - Skin: YES
 Route Of Entry - Ingestion: YES
 Health Haz Acute And Chronic: SKIN: IRRIT RESULT FORM DEFATTING ACTION ON TISSUE. LIQUID CONTACT W/SKIN COULD CAUSE FROSTBITE. EYE: LIQUID CONTACT FROSTBITE, MAY BE SEVERE. MIST MAY IRRIT. INHAL: LOW IN TOXICITY IN ANIMALS, WHEN OXY LEVELS REDUCED TO 12-14% BY DISPLACEMENT SYMPTOMS: ASPHYXIATION, LOSS OF COORDINATION, INCR PULSE RATE, DEEPER RESP. @ HIGHER (SUP)
 Carcinogenicity - NTP: NO
 Carcinogenicity - IARC: NO
 Carcinogenicity - OSHA: NO
 Explanation Carcinogenicity: PER MSDS: NO INGREDIENTS LISTED IN SECTION.
 Signs/Symptoms Of Overexp: SKIN IRRIT, DEFATTING ACTION. FROSTBITE. SEVERE EYE FROSTBITE, IRRIT EYE. ASPHYXIATION, LOSS OF COORDINATION, INCREASE PULSE RATE, DEEPER RESPIRATION, ARRHYTHMIA, DISCOMFORT GASTROINTESTINAL TRACT, NECROSIS.
 Med Cond Aggravated By Exp: NONE SPECIFIED BY MANUFACTURER.
 Emergency/First Aid Proc: SKIN: IMMEDIATELY FLUSH W/WATER TIL CHEM REMOVE. FROSTBITE, BATHE (DON'T RUB) W/ LUKEWARM WATER. NO WATER COVER W/CLEAN SOFT WOOL/SIMILAR. CALL DR. EYE: IMMEDIATELY FLUSH W/LG AMTS OF WATER @ LEAST 15MINS. FROSTBITE USE LUKEWARM WATER, LIFT EYELIDS. SYMPTOMS PERSIST GET MED ATTN. INHAL: IMMEDIATELY REMOVE TO FRESH AIR. STOP BREATH GIVE ART RESP. USE OXY FROM QUAL OPERATOR. CALL DR. DON'T GIVE EPINEPHRINE (ADRENALINE). INGEST: (SUPPLEMEN)

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 Precautions for Safe Handling and Use
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Steps If Matl Released/Spill: ALWAYS WEAR RECOMMENDED PPE. EVACUATE UNPROT PEOPLE. REMOVE IGN SOURCE/SHUT OFF LEAK W/O RISK. PROVIDE VENTI. UNPROT PEOPLE SHOULDN'T RETURN TIL AIR TESTED/DETERMINE SAFE INCLUDE LOW-LYING AREAS. MAY HAVE TO BE REPORTED TO FED/LOC AUTHOR. RQ: 5000LBS.
 Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.
 Waste Disposal Method: RCRA HAZ WASTE-U075. COMPLY W/FED/STATE/LOC DISPO/

DISCHARGE LAWS.USERS REVIEW OPERATIONS CONSULT W/APPROPRIATE REG AGENCY BEF DISCHARGE/DISPO OF WASTE MATL.DISPO BY LIC WASTE DISPO COMPANY.INFO OFFERED AS SHIPPED.USE/ETC SIGN CHANGE CHARACT ALTER CLAS

Precautions-Handling/Storing: ALWAYS WEAR RECOMMENDED PPE.AVOID BREATH VAP/LIQ CONTACT W/EYE/SKIN/CLOTH.DON'T PUNCTURE/DROP CYL/EXPO TO OPN FLAME/ EXCESS HEAT.USE AUTHOR CNTNR ONLY.

Other Precautions: FOLLOW STD SAFETY PRECAUT FOR HNDLG/USE CYL OF COMPRESSED GAS.STORE IN COOL WELL-VENTI AREA OF LOW FIRE RISK.PROTECT CNTNR/FITTINGS FROM PHY DMG.STORAGE IN SUBSURFACE LOCATIONS SHOULD BE AVOIDED.CLS VAL TIGHTLY/REPLACE BUNG AFT USE/EMPTY.

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Control Measures
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Respiratory Protection: NONE GEN REQUIRED FOR ADEQUATELY VENTI WORK SITUATIONS.ACCIDENTAL/NON-VENTI SITUATIONS ABOVE RECOMMENDED PEL(1000PPM) USE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS OR SUPPLIED AIR RESPIRATOR.

Ventilation: PROVIDE LOC EXHAU @FILLING ZONES/AREAS WHERE LEAKAGE PROBABLE.MECH(GEN)VENTI MAY BE ADQUA FOR OTEHR OPERATION/STORAGE.

Protective Gloves: MYLAR COAT DURAFAB,PVA,NEOPRENE GLOVES.

Eye Protection: SAFT GLASSES, CHEM SAFETY GOGGLES.

Other Protective Equipment: PROT IMPERV CLOTH W/OUTER MYLAR COATED DURAFAB LAYER,PVC OR NEOPRENE.IMPERV BOOTS,HI DOSE-LEVEL WARN SIGN,EYEWASH,SHOWER

Work Hygienic Practices: REMOVE/WASH IMMED WET/CONTAMIN CLOTH BEF REUSE. FOR TK CLEANING OPERATIONS SEE OSHA REGS.

Suppl. Safety & Health Data: HEALTH HAZ:LEVELS CARDIAC ARRHYTHMIA MAY OCCUR.INGEST:UNLIKELY EXPO ROUTE BECAUSE OF LOW BOILING PT,DISCOMFORT IN GI TRACT RESULT FROM RAPID EVAPORATION OF LIQ.NECROSIS FROM FREEZING OF TISSUE COULD OCCUR. 1STAID:DON'T INDUCE VOMIT UNLESS INSTRUCTED BY DR.DR:CAUTION USE OF CATECHOLAMINE DRUGS-DISTURB CARDIAC RHYTHM.

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Transportation Data
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Trans Data Review Date: 96313

DOT PSN Code: ETJ

DOT Proper Shipping Name: DICHLORODIFLUOROMETHANE OR REFRIGERANT GAS R 12

DOT Class: 2.2

DOT ID Number: UN1028

DOT Label: NONFLAMMABLE GAS

IMO PSN Code: FKB

IMO Proper Shipping Name: DICHLORODIFLUOROMETHANE

IMO Regulations Page Number: 2129

IMO UN Number: 1028

IMO UN Class: 2(2.2)

IMO Subsidiary Risk Label: -

IATA PSN Code: IWJ

IATA UN ID Number: 1028

IATA Proper Shipping Name: DICHLORODIFLUOROMETHANE

IATA UN Class: 2.2

IATA Label: NON-FLAMMABLE GAS

AFI PSN Code: IWJ

AFI Prop. Shipping Name: DICHLORODIFLUOROMETHANE

AFI Class: 2.2

AFI ID Number: UN1028

AFI Basic Pac Ref: A6.3,A6.5

Additional Trans Data: PER MSDS:DOT:DICHLORODIFLUOROMETHANE (R12), 2,2, NON-FLAMM GAS, UN 1028.

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Disposal Data
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Disposal Data Review Date: 88074

Rec # For This Disp Entry: 01

Tot Disp Entries Per NSN: 004

Landfill Ban Item: YES

Disposal Supplemental Data: MSDS REVISED DATE:AUGUST 1985. IN CASE OF ACCIDENTAL EXPOSURE OR DISCHARGE, CONSULT HEALTH AND SAFETY FILE FOR PRECAUTIONS.

1st EPA Haz Wst Code New: U075
1st EPA Haz Wst Name New: DICHLORODIFLUOROMETHANE
1st EPA Haz Wst Char New: TOXIC (T)
1st EPA Acute Hazard New: NO

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Label Data
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Label Required: YES
Technical Review Date: 08NOV96
MFR Label Number: NONE
Label Status: F
Common Name: GENETRON 12 DICHLORODIFLUOROMETHANE
Chronic Hazard: YES
Signal Word: WARNING!
Acute Health Hazard-Moderate: X
Contact Hazard-Slight: X
Fire Hazard-None: X
Reactivity Hazard-None: X
Special Hazard Precautions: SKIN:IRRIT FROM DEFAT ON TISSUE.EYE/SKIN:LIQ CONTACT CAUSE FROSTBITE,MAY BE SEVER.EEYE:MIST IRRIT.INHAL:OXY LEVELS REDUCE TO 12-14% BY DISPLACEMENT SYMPT:ASPHYXIATION,LOSS OF COORDIN,INCR PULSE RATE,DEEPER RESP.@HIGHER LEVELS CARDIAC ARRHY.INGEST:GI TRACT BATHE(DON'T RUB)W/LUKEWARM H2O/COVER W/BLANKET.CALL DR.EYE:IMMED FLUSH W/ LOTS OF H2O @LEAST 15MINS.FROSTBITE USE LUKEWARM H2O,LIFT EYELIDS.SYMPTOMS PERSIST GET MED ATTN.INHAL:IMMED REMOVE TO FRESH AIR.STOP BREATH GIVE ART RESP.USE OXY FROM QUAL OPERATOR.CALL DR.DON'T GIVE EPINEPHRINE(ADRENALINE). INGEST:DON'T INDUCE VOMIT.
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y
Label Name: ALLIED-SIGNAL INC, ENGINEERED MATERIALS SECTOR
Label Street: 101 COLUMBIA ROAD
Label P.O. Box: 1053
Label City: MORRISTOWN
Label State: NJ
Label Zip Code: 07962
Label Country: US
Label Emergency Number: 201-455-2000