

DOD Hazardous Materials Information System
DoD 6050.5-L
AS OF July 1998

FSC: 6830
NIIN: 00D003059
Manufacturer's CAGE: 86460
Part No. Indicator: A
Part Number/Trade Name: FORANE 22

=====
General Information
=====

Item Name: CHLORODIFLUOROMETHANE
Company's Name: ATOCHEM NORTH AMERICA INC-FORMERLY PENNWALT CORP
Company's Street: THREE PARKWAY
Company's P. O. Box:
Company's City: PHILADELPHIA
Company's State: PA
Company's Country: US
Company's Zip Code: 19102-1321
Company's Emerg Ph #: 215-587-7779/800-424-9300 (CHEMTREC)
Company's Info Ph #: 215-587-7513
Distributor/Vendor # 1:
Distributor/Vendor # 1 Cage:
Distributor/Vendor # 2:
Distributor/Vendor # 2 Cage:
Distributor/Vendor # 3:
Distributor/Vendor # 3 Cage:
Distributor/Vendor # 4:
Distributor/Vendor # 4 Cage:
Safety Data Action Code:
Safety Focal Point: D
Record No. For Safety Entry: 001
Tot Safety Entries This Stk#: 001
Status: SE
Date MSDS Prepared: 02MAR92
Safety Data Review Date: 12JUL93
Supply Item Manager: CX
MSDS Preparer's Name:
Preparer's Company:
Preparer's St Or P. O. Box:
Preparer's City:
Preparer's State:
Preparer's Zip Code:
Other MSDS Number:
MSDS Serial Number: BRDHH
Specification Number:
Spec Type, Grade, Class:
Hazard Characteristic Code: G3
Unit Of Issue:
Unit Of Issue Container Qty: NOT KNOWN
Type Of Container: NOT KNOWN
Net Unit Weight: NOT KNOWN

Report for NIIN: 00D003059

NRC/State License Number: N/R
Net Explosive Weight:
Net Propellant Weight-Ammo: N/R
Coast Guard Ammunition Code:

=====
Ingredients/Identity Information
=====

```

=====
Proprietary: NO
Ingredient: CHLORODIFLUOROMETHANE
Ingredient Sequence Number: 01
Percent: 100.0
Ingredient Action Code:
Ingredient Focal Point: D
NIOSH (RTECS) Number: PA6390000
CAS Number: 75-45-6
OSHA PEL: 1000 PPM
ACGIH TLV: 1000PPM; 9293
Other Recommended Limit: NONE RECOMMENDED
=====

```

Physical/Chemical Characteristics

```

=====
Appearance And Odor: COLORLESS LIQUEFIED GAS - FAINT ETHEREAL ODOR
Boiling Point: -41F,-41C
Melting Point: -256F,-160C
Vapor Pressure (MM Hg/70 F): 7031 @ 21C
Vapor Density (Air=1): 2.98
Specific Gravity: 1.17
Decomposition Temperature: UNKNOWN
Evaporation Rate And Ref: GAS
Solubility In Water: SLIGHT
Percent Volatiles By Volume: 100
Viscosity: NOT KNOWN
pH: N/R
Radioactivity:
Form (Radioactive Matl):
Magnetism (Milligauss): N/P
Corrosion Rate (IPY): UNKNOWN
Autoignition Temperature: N/R
=====

```

Fire and Explosion Hazard Data

```

=====
Flash Point: NONE
Flash Point Method: N/P
Lower Explosive Limit: N/R
Upper Explosive Limit: N/R
Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL FOR
SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.
Special Fire Fighting Proc: WEAR FULL PROTECTIVE CLOTHING AND NIOSH-
APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN
THE POSITIVE PRESSURE MODE.
Unusual Fire And Expl Hazrds: MAY FORM HYDROGEN FLUORIDE, HYDROGEN
CHLORIDE AND TRACES OF CARBONYL HALIDES.
=====

```

Report for NIIN: 00D003059

Reactivity Data

```

=====
Stability: YES
Cond To Avoid (Stability): FLAMES, EXTREMELY HOT METAL SURFACES, HEATING
ELEMENTS, COMBUSTION ENGINES, ETC.
Materials To Avoid: NOT KNOWN
Hazardous Decomp Products: MAY FORM HYDROGEN FLUORIDE, HYDROGEN CHLORIDE
AND TRACES OF CARBONYL HALIDES.
Hazardous Poly Occur: NO
Conditions To Avoid (Poly): NONE
=====

```

Health Hazard Data

```

=====
LD50-LC50 Mixture: 2 HR LC50 (RAT) 200,000 PPM
Route Of Entry - Inhalation: YES
Route Of Entry - Skin: NO
Route Of Entry - Ingestion: NO
Health Haz Acute And Chronic: ACUTE- MAY HAVE THE CENTRAL NERVOUS SYSTEM
EFFECTS. EYE:MAY CAUSE SIGNIFICANT IRRITATION. SKIN:LIQUID MAY CAUSE
FROSTBITE. ORAL:IT IS GAS AT ROOM TEMPERATURE. CHRONIC- MAY CAUSE CNS
EFFECTS.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity:
Signs/Symptoms Of Overexp: INHALATION MAY CAUSE DIZZINESS, HEADACHE,
UNCONSCIOUSNESS. MAY CAUSE SIGNIFICANT EYE IRRITATION. LIQUID MAY CAUSE
SKIN FROSTBITE.
Med Cond Aggravated By Exp: IT IS POSSIBLE THAT INDIVIDUALS WITH HEART OR
RESPIRATORY DISORDERS MAY PROVE ESPECIALLY SUSCEPTIBLE.
Emergency/First Aid Proc: GET MEDICAL ATTENTION IN ALL CASES. EYE/
SKIN:FLUSH WITH WATER FOR 15-20 MINUTES. HOLD EYELIDS OPEN. INHALED:REMOVE
TO FRESH AIR AND PROVIDE OXYGEN/CPR IF NEEDED. ORAL:NOT RELEVANT
=====

```

Precautions for Safe Handling and Use

```

=====
Steps If Matl Released/Spill: KEEP UPWIND. VENTILATE ENCLOSED SPACES UNTIL
GAS IS DISPERSED. DO NOT OPERATE INTERNAL COMBUSTION ENGINES IN IMMEDIATE
VICINITY.
Neutralizing Agent: NOT RELEVANT
Waste Disposal Method: FOR DISCHARGE OR DISPOSING OF WASTE MATERIAL,
CONSULT LOCAL, STATE AND FEDERAL AUTHORITIES.
Precautions-Handling/Storing: STORE WITH ADEQUATE VENTILATION. LIQUID AND
GAS UNDER PRESSURE. KEEP AWAY FROM HEAT/FLAME.
Other Precautions: AVOID BREATHING VAPORS. AVOID EYE OR SKIN CONTACT. WASH
WITH SOAP AND WATER BEFORE EATING OR DRINKING. USE WITH ADEQUATE
VENTILATION. NEVER USE IN CONFINED OR CLOSED SPACE.
=====

```

Control Measures

```

=====
Respiratory Protection: WEAR NIOSH-APPROVED SELF-CONTAINED BREATHING
APPARATUS. USE WITH ADEQUATE VENTILATION.
=====

```

Report for NIIN: 00D003059

```

Ventilation: LOCAL EXHAUST/MECHANICAL
Protective Gloves: CLOTH-LINED RUBBER GLOVES
Eye Protection: SAFETY GOGGLES/FACE SHIELD
Other Protective Equipment: EYEBATH, SAFETY SHOWER, PROTECTIVE CLOTHING
Work Hygienic Practices: OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING.
Suppl. Safety & Health Data:
=====

```

Transportation Data

```

=====
Transportation Action Code:
Transportation Focal Point: D
Trans Data Review Date: 93193
DOT PSN Code: DHC
DOT Symbol:
DOT Proper Shipping Name: CHLORODIFLUOROMETHANE OR REFRIGERANT GAS R 22.
DOT Class: 2.2
=====

```

DOT ID Number: UN1018
 DOT Pack Group:
 DOT Label: NONFLAMMABLE GAS
 DOT/DoD Exemption Number:
 IMO PSN Code: EDB
 IMO Proper Shipping Name: CHLORODIFLUOROMETHANE
 IMO Regulations Page Number: 2118
 IMO UN Number: 1018
 IMO UN Class: 2(2.2)
 IMO Subsidiary Risk Label: -
 IATA PSN Code: GHQ
 IATA UN ID Number: 1018
 IATA Proper Shipping Name: CHLORODIFLUOROMETHANE
 IATA UN Class: 2.2
 IATA Subsidiary Risk Class:
 IATA Label: NON-FLAMMABLE GAS
 AFI PSN Code: GHQ
 AFI Symbols:
 AFI Prop. Shipping Name: CHLORODIFLUOROMETHANE
 AFI Class: 2.2
 AFI ID Number: UN1018
 AFI Pack Group:
 AFI Label:
 AFI Special Prov:
 AFI Basic Pac Ref: 6-6,6-8
 MMAC Code:
 N.O.S. Shipping Name:
 Additional Trans Data:

=====

Disposal Data

=====

Disposal Data Action Code:
 Disposal Data Focal Point:
 Disposal Data Review Date:
 Rec # For This Disp Entry:
 Tot Disp Entries Per NSN:

Report for NIIN: 00D003059

Landfill Ban Item:
 Disposal Supplemental Data:
 1st EPA Haz Wst Code New:
 1st EPA Haz Wst Name New:
 1st EPA Haz Wst Char New:
 1st EPA Acute Hazard New:
 2nd EPA Haz Wst Code New:
 2nd EPA Haz Wst Name New:
 2nd EPA Haz Wst Char New:
 2nd EPA Acute Hazard New:
 3rd EPA Haz Wst Code New:
 3rd EPA Haz Wst Name New:
 3rd EPA Haz Wst Char New:
 3rd EPA Acute Hazard New:

=====

Label Data

=====

Label Required: YES
 Technical Review Date: 12JUL93
 Label Date:
 MFR Label Number: NOT APPLICABLE
 Label Status: F

Common Name: FORANE 22
Chronic Hazard: N/P
Signal Word: WARNING!
Acute Health Hazard-None:
Acute Health Hazard-Slight:
Acute Health Hazard-Moderate: X
Acute Health Hazard-Severe:
Contact Hazard-None:
Contact Hazard-Slight:
Contact Hazard-Moderate: X
Contact Hazard-Severe:
Fire Hazard-None: X
Fire Hazard-Slight:
Fire Hazard-Moderate:
Fire Hazard-Severe:
Reactivity Hazard-None: X
Reactivity Hazard-Slight:
Reactivity Hazard-Moderate:
Reactivity Hazard-Severe:
Special Hazard Precautions: ACUTE- MAY HAVE CNS EFFECTS. EYE:MAY CAUSE
SIGNIFICANT IRRITATION. SKIN:LIQUID MAY CAUSE FROSTBITE. ORAL:PRODUCT IS
GAS AT ROOM TEMPERATURE. CHRONIC- MAY CAUSE CNS EFFECTS. STORE WITH
ADEQUATE VENTILATION. LIQUID AND GAS UNDER PRESSURE. KEEP AWAY FROM HEAT/
FLAME. MAY FORM HYDROGEN FLUORIDE, HYDROGEN CHLORIDE IN FIRE. IN CASE OF
SPILL: KEEP UPWIND. VENTILATE ENCLOSED SPACES UNTIL GAS IS DISPERSSED.
FIRST AID- GET MEDICAL ATTENTION IN ALL CASES. EYE/SKIN:FLUSH WITH WATER
FOR 15-20 MINUTES. HOLD EYELIDS OPEN. INHALED:REMOVE TO FRESH AIR AND
PROVIDE OXYGEN/CPR IF NEEDED. ORAL:NOT RELEVANT
Protect Eye: Y
Protect Skin: Y
Protect Respiratory: Y

Report for NIIN: 00D003059

Label Name: ATOCHEM NORTH AMERICA INC-FORMERLY PENNWALT
CORP
Label Street: THREE PARKWAY
Label P.O. Box:
Label City: PHILADELPHIA
Label State: PA
Label Zip Code: 19102-1321
Label Country: US
Label Emergency Number: 215-587-7779/800-424-9300(CHEMTREC)
Year Procured: