CHEMTRONICS -- E-SERIES FREEZ-IT 2000 ANTISTAT - FREEZING COMPOUND

MATERIAL SAFETY DATA SHEET

NSN: 6850013331841

Manufacturer's CAGE: 21267 Part No. Indicator: B

Part Number/Trade Name: E-SERIES FREEZ-IT 2000 ANTISTAT

General Information

Item Name: FREEZING COMPOUND Company's Name: CHEMTRONICS INC

Company's Street: 8125 COBB CENTER DRIVE

Company's City: KENNESAW Company's State: GA Company's Country: US Company's Zip Code: 30144

Company's Emerg Ph #: 800-424-9300 CHEMTREC

Company's Info Ph #: 800-645-5244 Record No. For Safety Entry: 004 Tot Safety Entries This Stk#: 005

Status: FE

Date MSDS Prepared: 14JUL94 Safety Data Review Date: 22FEB96

Supply Item Manager: CX

MSDS Preparer's Name: MICHAEL S. WATKINS

MSDS Serial Number: BWZSP Specification Number: NONE Spec Type, Grade, Class: NONE Hazard Characteristic Code: J7

Unit Of Issue: BX

Unit Of Issue Container Qty: 12 X 14-150Z

Type Of Container: IP7B/4G Net Unit Weight: 10.5-11.3LB

Ingredients/Identity Information

Proprietary: NO

Ingredient: 1, 1, 1, 2-TETRAFLUOROETHANE

Ingredient Sequence Number: 01

Percent: 94-99.9

NIOSH (RTECS) Number: 1008365TE

CAS Number: 811-97-2 OSHA PEL: NOT ESTABLISHED ACGIH TLV: NOT ESTABLISHED

Other Recommended Limit: NONE RECOMMENDED

Proprietary: NO

Ingredient: METHYL ALCOHOL (METHANOL) (SARA 313) (CERCLA)

Ingredient Sequence Number: 02

Percent: 0.1-1.5

NIOSH (RTECS) Number: PC1400000

CAS Number: 67-56-1 OSHA PEL: S, 200 PPM

ACGIH TLV: S, 200PPM/250STEL; 95

Other Recommended Limit: NONE RECOMMENDED

Physical/Chemical Characteristics

Appearance And Odor: CLEAR, COLORLESS LIQUIFIED GAS IN AEROSOL CAN; SLIGHT

ETHEREAL ODOR.

Boiling Point: -16F, -27C Melting Point: UNKNOWN

Vapor Pressure (MM Hg/70 F): 4264 MM HG

Vapor Density (Air=1): 3.18 Specific Gravity: 1.21

Decomposition Temperature: UNKNOWN

Evaporation Rate And Ref: <1 (N-BUTYL ACETATE=1)

Solubility In Water: SLIGHT Percent Volatiles By Volume: 100

Viscosity: UNKNOWN

Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: NONE

Flash Point Method: TCC

Extinguishing Media: WATER FOG, CARBON DIOXIDE, ALCOHOL FOAM

Special Fire Fighting Proc: WEAR SELF-CONTAINED BREATHING APPARATUS AND

FULL PROTECTIVE GEAR. COOL FIRE EXPOSED CONTAINERS WITH WATER.
Unusual Fire And Expl Hazrds: NONE SPECIFIED BY MANUFACTURER.

Reactivity Data

Stability: YES

Cond To Avoid (Stability): DO NOT SPRAY NEAR OPEN FLAMES, RED HOT SURFACES OR OTHER SOURCES OF IGNITION.

Materials To Avoid: POWDERED ALKALI & ALKALINE EARTH METALS, STRONG OXIDIZING AGENTS.

Hazardous Decomp Products: THERMAL DECOMPOSITION MAY RELEASE HYDROFLUORIC ACID AND POSSIBLY CARBONYL HALIDES.

Hazardous Poly Occur: NO

Conditions To Avoid (Poly): WILL NOT OCCUR.

Health Hazard Data

LD50-LC50 Mixture: UNKNOWN

Route Of Entry - Inhalation: YES

Route Of Entry - Skin: NO

Route Of Entry - Ingestion: NO

Health Haz Acute And Chronic: ACUTE: HARMFUL IF INHALED IN LARGE

CONCENTRATION; MAY CAUSE ASPHYXIATION. CONTACT MAY CAUSE EYE IRRITATION;

FROSTBITE TO SKIN AND/OR EYES. INGESTION IS NOT A LIKELY ROUTE OF EXPOSURE;

CONTACT MAY CAUSE FROSTBITE TO LIPS AND MOUTH. CHRONIC: PROLONGED OR

REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION.

Carcinogenicity - NTP: NO Carcinogenicity - IARC: NO Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUEPECTED CARCINOGEN.

Signs/Symptoms Of Overexp: INHALED-DIZZINESS, UNCONSCIOUSNESS. SKIN-

IRRITATION, FROSTBITE. EYES-IRRITATION, FROSTBITE.

Med Cond Aggravated By Exp: HEART, LUNG, SKIN, EYE.

Emergency/First Aid Proc: INHALATION-REMOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING IS DIFFICULT. GET

MEDICAL ATTENTION. EYES-FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. SKIN-WASH WITH PLENTY OF SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. INGESTED-INDUCE VOMITING AS DIRECTED BY MEDICAL PERSONNEL. GET MEDICAL ATTENTION.

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: ABSORB SPILL WITH INERT MATERIAL THEN PLACE IN CHEMICAL WASTE CONTAINER FOR PROPER DISPOSAL. AVOID RUNOFF INTO STORM SEWERS AND DITCHES WHICH LEAD TO WATERWAYS. IF PRODUCT REACHES WATERWAY CALL 800-424-8802-USCG NATIONAL RESPONSE CENTER.

Neutralizing Agent: NONE SPECIFIED BY MANUFACTURER.

Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL ENVIRONMENTAL REGULATIONS. WATER RUN-OFF CAN CAUSE ENVIRONMENTAL DAMAGE. ENVIRONMENTAL DATA: SARA 313-METHANOL, CAS# 67-65-1, 0.1-1.0%. CONTAINS HFC-99.1%.

Precautions-Handling/Storing: USE WITH ADEQUATE VENTILATION. STORE IN A COOL, DRY PLACE AWAY FROM SOURCES OF IGNITION AND STRONG OXIDIZING AGENTS. DO NOT STORE IN DIRECT SUNLIGHT.

Other Precautions: KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT REUSE CONTAINER. KEEP OUT OF REACH OF CHILDREN!! AVOID BREATHING VAPOR OR MIST. AVOID PROLONED OR REPEATED CONTACT WITH EYES, CKIN AND CLOTHING. DO NOT PUNCTURE OR INCINERATE CANS.

Control Measures

Respiratory Protection: NONE SPECIFIED BY MANUFACTURER. DLA-HMIS: IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED AIR-SUPPLIED RESPIRATOR OR SCBA, AS REQUIRED. USE IN ACCORDANCE WITH 29 CFR 1910. 134.

Ventilation: USE ADEQUATE MECHANICAL VENTILATION OR LOCAL EXHAUST TO MAINTAIN EXPOSURE BELOW TLV(S).

Protective Gloves: NONE SPECIFIED BY MANUFACTURER.

Eye Protection: SAFETY GLASSES W/SIDE SHIELDS.

Other Protective Equipment: NONE SPECIFIED BY MANUFACTURER.

Work Hygienic Practices: WASH HANDS AFTER HANDLING AND BEFORE EATING,

DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE.

Suppl. Safety & Health Data: MSDS PRESENTED BY CAGE 21267 FOR CONTRACT NUMBER SP0450-95-D-4079.

Transportation Data

Trans Data Review Date: 98054

DOT PSN Code: OAB

DOT Proper Shipping Name: 1, 1, 1, 2- TETRAFLUOROETHANE OR REFRIGERANT GAS

R 134A *

DOT Class: 2.2

DOT ID Number: UN3159

DOT Label: NON-FLAMMABLE GAS

DOT/DoD Exemption Number: DOT-E-10232

IMO PSN Code: AKD

IMO Proper Shipping Name: AEROSOLS o

IMO Regulations Page Number: 2102 IMO UN Number: 1950

IMO UN Class: 2(T)

IMO Subsidiary Risk Label: T

IATA PSN Code: ANB

IATA UN ID Number: 1950

IATA Proper Shipping Name: AEROSOLS, 20, *

IATA UN Class: 2.2

IATA Label: NON-FLAMMABLE GAS

AFI PSN Code: ANB

AFI Prop. Shipping Name: AEROSOLS, NON-FLAMMABLE, N.O.S.

AFI Class: 2.2

AFI ID Number: UN1950 AFI Special Prov: P4 AFI Basic Pac Ref: A6.3

MMAC Code: NR

N. O. S. Shi ppi ng Name: 1, 1, 1, 2-TETRAFLUOROETHANE

Additional Trans Data: 12X14-15 OZ AEROSOL CANS/BX. EXEMPTION DOT-

E-10232, EXPIRES 31JAN99.

Disposal Data

Label Data

Label Required: YES

Technical Review Date: 22FEB96

Label Status: F

Common Name: E-SERIES FREEZ-IT 2000 ANTISTAT

Chronic Hazard: YES Signal Word: WARNING!

Acute Health Hazard-Moderate: X

Contact Hazard-Moderate: X Fire Hazard-Slight: X Reactivity Hazard-None: X

Special Hazard Precautions: HARMFUL IF INHALED IN LARGE CONCENTRATION; MAY CAUSE ASPHYXIATION. CONTACT MAY CAUSE EYE IRRITATION; FROSTBITE TO SKIN, EYES, LIPS & MOUTH. PROLONGED OR REPEATED EXPOSURE MAY CAUSE SKIN IRRITATION. TARGET ORGANS: HEART, LUNG, SKIN, EYES. FIRST AID: INHALATION-REMOVE TO FRESH AIR. GIVE ARTIFICAL RESPIRATION IF NOT BREATHING. GIVE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION. EYES-FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION. SKIN-WASH WITH PLENTY OF SOAP & WATER. REMOVE CONTAMINATED CLOTHING. GET MEDICAL ATTENTION IF SYMPTOMS PERSIST. INGESTED-INDUCE VOMITING AS DIRECTED BY MEDICAL PERSONNEL. GET MEDICAL ATTENTION.

Protect Eye: Y Protect Skin: Y

Protect Respiratory: Y

Label Name: CHEMTRONICS INC

Label Street: 8125 COBB CENTER DRIVE

Label City: KENNESAW

Label State: GA

Label Zip Code: 30144

Label Country: US

Label Emergency Number: 800-424-9300 CHEMTREC

Year Procured: 1995