

GENETRON (R) 22 CHLORODIFLUOROMETHANE

MSDS Number

BNBZM

National Stock Number

6830-00-227-0441

Product Name

GENETRON (R) 22 CHLORODIFLUOROMETHANE

Manufacturer

ALLIED SIGNAL INC ENGINEERED MATERIAL SECTOR

Product Identification

Product ID: GENETRON (R) 22 CHLORODIFLUOROMETHANE

MSDS Date: 05/01/1989

FSC: 6830

NIIN: 00-227-0441

MSDS Number: BNBZM

Responsible Party

ALLIED-SIGNAL, INC; ENGINEERED MATERIAL SECTOR

MORRISTOWN, NJ 07960-1139

US

Emergency Phone: 201-455-2000

Info Phone: 201-455-4157

Cage: 05VM8

Contractor

REFRIGERATION SALES CO INC

LONG ISLAND CITY, NY 11101-2211

US

800-221-0603

Cage: 3A676

Ingredients

GENETRON 22 CHLORODIFLUOROMETHANE (FLUOROCARBON 22;

CAS: 75-45-6

RTECS: PA6390000

Fraction By Weight: 100%

OSHA PEL 1000 PPM

ACGIH TLV: 1000PPM/1250PPM STEL

Hazards

Health Hazards Acute and Chronic: INHAL: MAT'L IS LOW IN TOXICITY AT CONCENTRATIONS AS HIGH AS 4%. WHEN OXYGEN LEVELS IN AIR ARE REDUCED TO 12-14% SYMPTOMS OF ASPHYXIATION WILL OCCUR. NARCOTIC EFFECTS. SKIN: CONTACT W/LIQUID MAT'L CAN CAUSE FROSTBITE, INDICATED BY PALLOR OR REDNESS, LOSS OF SENSATION AND SWELLING. EYES: SAME AS FOR SKIN. ***

Effects of Overexposure: INHALATION: LOSS OF COORDINATION, INCREASED PULSE RATE, CARDIAC SENSITIZATION AND DEEPER RESPIRATION ARE POSSIBLE.

***ANIMAL: REDUCED HEART

EFFICIENCY, CARDIAC SENSITIZATION TO EPINEPHRINE. INCREASE IN

SALIVARY GLAND TUMORS (RAT).

Medical Cond Aggravated by Exposure:WORKERS WITH CARDIOVASCULAR OR PULMONARY PROBLEMS SHOULD HAVE MEDICAL EVALUATION BEFORE EXPOSURE.

First Aid

First Aid:INHAL: REMOVE IMMED TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIF RESPIRATION, PREFERABLY MOUTH-TO-MOUTH. USE OXYGEN AS REQUIRED, IF QUALIFIED OPERATOR IS AVAILABLE. DON'T GIVE EPINEPHRINE (ADREN ALIN). SKIN/EYE CONTACT: IMMED BATHE FROSTBITE (DO NOT RUB) WITH LUKEWARM (NOT HOT) WATER. IN ABSENCE OF WATER COVER WITH SOFT WOOL, ETC. CONTACT DR FOR ANY LOW TEMPERATURE BURNS FROM LIQ CONTACT.

Fire Fighting

Extinguishing Media:ANY STANDARD AGENT--CHOOSE THE ONE THAT IS APPROPRIATE FOR TYPE OF FIRE. MATERIAL ITSELF IS NON-FLAMMABLE. Fire Fighting Procedures:WEAR SELF-CONTAINED NIOSH BREATHING APPARATUS FOR PROTECTION AGAINST SUFFOCATION & POSSIBLE TOXIC DECOMP PRODUCTS. USE WATER SPRAY TO COOL FIRE EXPOSED CNTNRS. Unusual Fire/Explosion Hazard:WHILE NOT COMBUSTIBLE, CONTACT W/CERTAIN METALS & OXIDIZING MAT'LS MAY PRODUCE EXOTHERMIC REACTION/POTENTIALLY EXPLOS COMBINATIONS. SEE HAZARD DECOMP.

Accidental Release

Spill Release Procedures:USING SELF-CONTAINED AIR SUPPLY & PROTECTION AGAINST FROSTBITE, PERSONNEL SHOULD ATTEMPT TO CLOSE VALVES OR REPAIR SOURCE OF LEAK. IF LARGE QUANTITY IS RELEASED, EVACUATE PERSONNEL AND ALLOW TO DISSIP ATE.

Handling

Handling and Storage Precautions:AVOID EYE/SKIN/CLOTHING CONTACT. DON'T PUNCTURE/DROP CYLINDERS/EXPOSE TO FLAME/HEAT. USE AUTHORIZED CNTNRS. FOLLOW STD SFTY PRECAUTION FOR COMPRSD GAS Other Precautions:STORE IN COOL, DRY, VENTED AREA AWAY FROM HEAT/FLAME/COMBUSTIBLES. PROTECT CYLINDER & FITTINGS FROM DAMAGE. AVOID STORAGE IN SUBSURFACE LOCATIONS. FOLLOW OSHA REGULATIONS FOR COMPRESSED GAS & FOR CYLI NDER HANDLING.

Exposure Controls

Respiratory Protection:NONE GENERALLY REQUIRED FOR ADEQUATELY VENTED SITUATIONS. FOR UNUSUAL SITUATIONS, WEAR A NIOSH APPROVED, SUPPLIED AIR RESPIRATOR OR A POSITIVE PRESSURE, SELF-CONTAINED BREATHING APPARATUS. AT HIGH CON CENTRATIONS ADD A FULL FACEPIECE.

Ventilation:PROVIDE LOCAL EXHAUST AT FILLING ZONES/AREA LEAK LIKELY. MECHAN(GEN) VENT FOR OTHER OPERATING/STORAGE AREAS.

Protective Gloves:IMPERVIOUS GLOVES W/PVA OUTER LAYER****

Eye Protection:CHEM SAFETY GOGGLES IF CONTACT *****

Other Protective Equipment:WEAR IMPERVIOUS SHOES & CLOTHING WHERE LEAKAGE IS PROBABLE. GLOVES, CLOTHING, SHOES SHOULD BE THERMALLY INSULATED.

Work Hygienic Practices:PROVIDE WATER SOURCE FOR FIRST AID TREATMENT (FROSTBITE). **** (NEOPRENE-2ND CHOICE) IF HANDLING/LEAKAGE POSSIBLE.

Supplemental Safety and Health

***** IS REASONABLE PROBABILITY. IN THIS CASE, DON'T WEAR CONTACT LENSES.

Chemical Properties

Boiling Pt:B.P. Text:-41F,-41C

Melt/Freeze Pt:M.P/F.P Text:-256F,-160C

Vapor Pres:136 PSIA

Vapor Density:2.98

Spec Gravity:1.21 LIQ@21.1C*

pH:N/K **

Evaporation Rate & Reference:N/K *(PRESSUREIZED)WTR=1

Solubility in Water:0.3 @ 25C & 1 ATM

Appearance and Odor:COLORLESS LIQUEFIED GAS WITH FAINT ETHEREAL ODOR AT

HIGHER CONCENTRATIONS.
Percent Volatiles by Volume:100

Stability

Stability Indicator/Materials to Avoid: YES
STRONG OXIDANTS, ALKALI METALS, ALKALINE EARTH METALS. FRESHLY EXPOSED ALUMINUM SURFACES.
Stability Condition to Avoid: FIRES, LIGHTED CIGARETTES, HOT SPOTS, WELDING. DECOMPOSES AT HIGH TEMPERATURES, YIELDING TOXIC GASES.
Hazardous Decomposition Products: HALOGENS, HALOGEN ACIDS, CARBON DIOXIDE, CARBON MONOXIDE, AND POSSIBLY CARBONYL HALIDES, SUCH AS PHOSGENE.

Disposal

Waste Disposal Methods: DISPOSE OF WASTE PRODUCT MAY BE SUBJECT TO FEDERAL REGULATIONS. USERS SHOULD REVIEW OPERATIONS, THEN CONSULT WITH REGULATORY AGENCIES BEFORE DISCHARGING OR DISPOSING OF WASTE MATERIAL. DISPOSAL BY LICENSED WASTE DISPOSAL COMPANY MAY BE NECESSARY.

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