

NATIONAL REFRIGERANTS, INC. -- NATIONAL REFRIGERANT 500 -- 6830-01-137-7971

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

Product ID:NATIONAL REFRIGERANT 500

MSDS Date:01/01/1987

FSC:6830

NIIN:01-137-7971

MSDS Number: BJZKW

=== Responsible Party ===

Company Name:NATIONAL REFRIGERANTS, INC.

Address:11401 ROOSEVELT BLVD.

City:PHILADELPHIA

State:PA

ZIP:19154

Country:US

Info Phone Num:609-455-4555/800-424-9300 C

HEMTREC

Emergency Phone Num:609-455-4555/800-424-9300 CHEMTREC

CAGE:7Y146

=== Contractor Identification ===

Company Name:NATIONAL REFRIGERANTS INC

Address:661 KENYON AVE

Box:City:BRIDGETON

State:NJ

ZIP:08302

Country:US

Phone:800-262-0012/215-698-6620

CAGE:4J994

Company Name:NATIONAL REFRIGERANTS INC

Address:11401 ROOSEVELT BLVD

Box:City:PHILADELPHIA

State:PA

ZIP:19154

Country:US

Phone:215-834-0200

CAGE:7Y146

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

Ingred Name:DICHL

ORODIFLUOROMETHANE (SARA III)

CAS:75-71-8

RTECS #:PA8200000

Fraction by Wt: 73.8%

Other REC Limits:NONE SPECIFIED

OSHA PEL:1000 PPM

ACGIH TLV:1000 PPM; 9192

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ozone Depleting Chemical:1

Ingred Name:1,1-DIFLUOROETHANE

CAS:75-37-6

RTECS #:K11410000

Fraction by Wt: 23.2%

Other REC Limits:NONE SPECIFIED

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

LD50 LC50 Mixture:LC 50 ORAL RAT >800,000 MG/KG (CCL2F2)

Routes of Entry: Inhalation:Y

ES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:INHALATION: VAPOR IS HEAVIER THAN AIR AND CAN CAUSE SUFFOCATION BY REDUCING OXYGEN AVAILABLE FOR BREATHING. BREATHING HIGH CONCENTRATIONS OF VAPOR MAY CAUSE LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH, AND MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH. SKIN/EYE: IRRITATION AND FROSTBITE.

Explanation of Carcinogenicity:DICHLORODIFLUORO

METHANE (FREON 12) IS

NOT LISTED AS A CARCINOGEN BY IARC, NTP OR OSHA.

Effects of Overexposure:BREATHING HIGH CONCENTRATIONS OF VAPOR MAY CAUSE LIGHT-HEADEDNESS, GIDDINESS, SHORTNESS OF BREATH, AND MAY LEAD TO NARCOSIS, CARDIAC IRREGULARITIES, UNCONSCIOUSNESS OR DEATH. LIQUID IS IRRITATING TO SKIN AND EYES, AND MAY CAUSE FROSTBITE.

Medical Cond Aggravated by Exposure:PERSONS WITH KNOWN HISTORY OF HEART DISEASE OR IRREGULARITIES OF HEARTBEAT SHOULD BE PARTICULARLY CAREFUL

TO AVOID OVEREXPOSURE TO THESE VAPORS.

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

First Aid:INALATION: REMOVE TO FRESH AIR, CALL A PHYSICIAN. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN. DO NOT GIVE EPINEPHRINE OR SIMILAR DRUGS. EYE: FLUSH WITH WATER FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION. SKIN: WASH WITH SOAP AND WATER. IF FROSTBITE, WARM SKIN SLOWLY. GET MEDICAL ATTENTION.

=====

Fire Fighting Measures =====

Extinguishing Media:USE WATER FOG, CARBON DIOXIDE, FOAM, OR DRY
CHEMICAL AS APPROPRIATE FOR SURROUNDINGS.

Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A
FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL
FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:COMBUSTION OR HEAT OF FIRE MAY PRODUCE
HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.

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

Spill Release Procedures:VENTILATE AREA. KEEP UPWIND, EVACUATE ENCLOSED
SPACE. DISPERSE GAS WITH FLOOR-LEVEL FORCED AIR VENTILATION OR
WATER SPRAY. DO NOT SMOKE. REMOVE FLAMES, HEATING ELEMENTS, GAS
ENGINES, ETC.

Neutralizing Agent:NONE

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

Handling and Storage Precautions:STORE IN A CLEAN, COOL, DRY AND
WELL-VENTILATED AREA OF LOW FIRE RISK. PROTECT CONTAINERS FROM
PHYSICAL DAMAGE AND KEEP TIGHTLY CLOSED.

Other Precautions:AVOID BREATHING VAPOR, LIQUID CONTACT WITH EYES, SKIN
OR CLOTHING. DO NOT DROP, REUSE, OR REFILL CONTAINER. DO NOT STORE
NEAR HEAT OR IN DIRECT SUN. KEEP CONTAINERS BELOW 120 F. READ LABEL
BEFORE USE.

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

Respiratory Protection:NONE REQUIRED FOR ADEQUATELY VENTED WORK
SITUATIONS. FOR ACCIDENTAL OR NON-VENTILATED SITUATIONS, USE A
SELF-CONTAINED BREATHING APPARATUS
OR SUPPLIED-AIR RESPIRATOR,
APPROVED BY NIOSH.

Ventilation:PROVIDE LOCAL AND MECHANICAL EXHAUST WHEN USED.

Protective Gloves:SYNTHETIC INSULATED RUBBER GLOVE

Eye Protection:CHEMICAL SPLASH GOGGLES

Other Protective Equipment:USE IMPERVIOUS CLOTHING TO PROTECT EXPOSED
SKIN FROM LIQUID CONTACT.

Work Hygienic Practices:DO NOT SMOKE IN AREA WHILE PRODUCT IS IN USE.

Supplemental Safety and Health

AVOID BREATHING OF VAPORS AND CONTACT WITH EYES/SKIN.

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

rties =====

HCC:G3

Boiling Pt:B.P. Text:-28F,-33C

Vapor Pres:232 @54C

Vapor Density:3.7 AIR=1

Spec Gravity:1.16

Evaporation Rate & Reference:>1 CCL4=1

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR LIQUIFIED GAS; COLORLESS; SLIGHT ETHEREAL
ODOR

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, ALKALI OR ALKALINE EARTH METALS, POWDERED AL,
Z

N, BE ETC.

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES
OF IGNITION

Hazardous Decomposition Products:DECOMPOSED BY HIGH TEMPERATURES (OPEN
FLAMES, GLOWING METAL SURFACES, ETC.) FORMING HYDROCHLORIC AND
HYDROFLUORIC ACIDS.

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

Waste Disposal Methods:BEST TO RECYCLE OR RECLAIM, IF POSSIBLE. WASTE
MATERIAL IS A LAND-BANNED HAZARDOUS WASTE (CODE U075). CONSULT
FEDERAL, STATE, OR LOCAL AUTHO
RITIES FOR PROPER DISPOSAL
PROCEDURES.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department
of Defense. The United States of America in no manner whatsoever,
expressly or implied, warrants this information to be accurate and
disclaims all liability for its use. Any person utilizing this
document should seek competent professional advice to verify and
assume responsibility for the suitability of t

his information to their particular situation.