

NATIONAL REFRIGERANTS INC -- NATIONAL REFRIGERANT 12 -- 6830-00-935-9895

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

Product ID:NATIONAL REFRIGERANT 12
MSDS Date:06/01/1988
FSC:6830
NIIN:00-935-9895
MSDS Number: BNRGM
=== Responsible Party ===
Company Name:NATIONAL REFRIGERANTS INC
Address:89 WATER STREET
City:BRIDGETON
State:NJ
ZIP:08302-2545
Country:US
Info Phone Num:609-455-4555
Emergency Phone Num:MED
609-455-4555 CHEM 800-424-9300
Preparer's Name:T NAPRAVE
CAGE:4J994
=== 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

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

Ingred Name:DICHLORODIFLUOROMETHANE (SARA III)
CAS:75-71-8
RTECS #:PA8200000
Fraction by Wt: 100%
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

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

LD50 LC50 Mixture:ORAL RAT LD50 IS 1000 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:INHALATION IF HIGH CONCENTRATIONS OF VAPOR IS HARMFUL ANDF MAY CAUSE HEART IRREGULARITITES, UNCONSCIOUSNESS, OR DEATH. INTENTIONAL MISUSE MAY BE FATAL. VAPOR R
EDUCES OXYGEN AVAILABLE FOR BREATHING AND IS HEAVIER THAN AIR. LIQUID CONTACT CAUSESS FROSTBITE.
Explanation of Carcinogenicity:NONE OF THE CHEMICALS IN THIS PRODUCT IS LISTED BY IARC, NTP, OSHA OR ACGIH AS A CARCINOGEN.
Effects of Overexposure:EYE: IRRITATION, SKIN: LIQUID CONTACT CAUSES FROSTBITE. INHALED: RESPIRATORY DISTRESS, HEART IRREGULARITIES, CNS DEPRESSION, HEADACHE CONFUSION. INGESTED: UNLIKELY EXPOSURE.
Medical Cond Aggravated by Exposure:SUPPLIER DID NOT ADDRESS THIS

FIELD.

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

First Aid:INHALATION: REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICAL RESPIRATION, PREFERREDLY MOUTH-TO-MOUTH. IF BREATHING IS DIFFICULT GIVE OXYGEN. CALL A PHYSICIAN. SKIN: FLUSH WITH WATER. TREAT FOR FROSTBITE IF NECESSARY. EYES: IMMEDIATELY FLUSH WITH PLENTY OF WATER. CALL A PHYSICIAN. IF SWALLOWED: NOT LIKELY TO BE HAZARDOUS. CONSULT A PHYSICIAN.

=====
Fire Fighting Measures
=====

Flash Point:NON-FLAMMABLE
Lower Limits:NONE
Upper Limits:NONE
Extinguishing Media:AS APPROPRIATE FOR COMBUSTIBLES IN AREA.
Fire Fighting Procedures:SELF-CONTAINED BREATHING APPARATUS, IS REQUIRED IF CYLINDERS RUPTURE OR RELEASE UNDER FIRE CONDITIONS.
Unusual Fire/Explosion Hazard:USE WATER SPRAY OR FOG TO COOL CONTAINERS. CYLINDERS MAY RUPTURE UNDER FIRE CONDITIONS. DECOMPOSITION MAY OCCUR.

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

=====

Spill Release Procedures:VENTILATE AREA-ESPECIALLY LOW PLACES WHERE HEAVY VAPORS MIGHT COLLECT. WEAR SELF-CONTAINED BREATHING APPARATUS FOR LARGE SPILLS. REMOVE OPEN FLAME.

Neutralizing Agent:NO INFORMATION GIVEN ON MSDS BY SUPPLIER

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

Handling and Storage Precautions:NO INFORMATION GIVEN ON MSDS BY SUPPLIER

Other Precautions:NONE

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

Respir

atory Protection:UNDER NORMAL MANUFACTURING CONDITIONS, NO RESPIRATORY PROTECTION IS REQUIRED WHEN USING THIS PRODUCT.

SELF-CONTAINED BREATHING APPARATUS IS REQUIRED IF A SPILL OCCURS.

Ventilation:NORMAL VENT FOR STD MFR PROCEDURES IS ADEQUATE. LARGE AMTS: LOCAL EXHAUST. MECHANICAL VENT USED IN LOW PLACES.

Protective Gloves:LINED BUTYL

Eye Protection:CHEMICAL SPLASH GOGGLES

Other Protective Equipment:NO INFORMATION GIVEN ON MSDS BY SUPPLIER

Work Hygienic Practices:NO INFORMATION GIVEN ON MSDS BY SUPPLIER

Supplemental Safety and Health

MSDS RECEIVED FROM NAVY (FOCAL POINT N). NAVY IDENTIFIED NSN.

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

HCC:G3

Boiling Pt:B.P. Text:-30F,-34C

Decomp Temp:Decomp Text:>1400F,>760

Vapor Pres:94.5 PSIA

Vapor Density:4.26

Spec Gravity:1.315 (LIQUID)

pH:NEUT

Solubility in Water:0.28%

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

Percent Volatiles by Volume:100

Corrosion Rate:UNKNOWN

=====

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

Stability Indicator/Materials to Avoid: YES

ALKALI, OR ALKALINE EARTH METALS-POWDERED AL, ZN, BE, ETC.

Stability Condition to Avoid: AVOID OPEN FLAMES, HIGH TEMPERATURES.

Hazardous Decomposition Products: MAY DECOMPOSED BY HIGH TEMP (OPEN FLAME, GLOWING SURFACES) FORMING HYDROCHLORIC AND HYDROFLUORIC ACIDS, CARBONYL CHLORIDE

Conditions to Avoid Polymerization: WILL NOT OCCUR.

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

Waste Disposal Methods: COMPLY WITH LOCAL, STATE AND FEDERAL REGULATIONS, OR REMOVE TO A PERMITTED WASTE DISPOSAL FACILITY. RECLAIM BY DISTILLATION.

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 this information to their particular situation.