

ANSUL FIRE PROTECTION,WORMALD U.S.INC. -- NITROGEN CARTRIDGE FOR ANSUL
EXTINGUISHER -- 4210-01-059-4743

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

Product ID:NITROGEN CARTRIDGE FOR ANSUL EXTINGUISHER

MSDS Date:06/01/1989

FSC:4210

NIIN:01-059-4743

MSDS Number: BJYBC

=== Responsible Party ===

Company Name:ANSUL FIRE PROTECTION,WORMALD U.S.INC.

Address:ONE STANTON STREET

City:MARINETTE

State:WI

ZIP:54143-254

2

Country:US

Info Phone Num:715-735-7411

Emergency Phone Num:715-735-7411

CAGE:03670

=== Contractor Identification ===

Company Name:ALL-SAFE INC

Address:4767 LANGTON RD

Box:116

City:HILLIARD

State:OH

ZIP:43026

Country:US

Phone:614-876-4041

CAGE:2X264

Company Name:ANSUL INC

Address:ONE STANTON STREET

Box:City:MARINETTE

State:WI

ZIP:54143-2542

Country:US

Phone:715-735-7411

CAGE:03670

Company Name:HILLER SYSTEMS INC

Address:833 PRINCIPAL LN

Box:City:CHESAPEAKE

State:VA

ZIP:23320

Country:US

Phone:75

7-549-9123

Contract Num:SP0560-99-M-H005

CAGE:1DA54

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

Ingred Name:NITROGEN

CAS:7727-37-9

RTECS #:QW9700000

Fraction by Wt: 100%

Other REC Limits:NONE SPECIFIED

ACGIH TLV:ASPHYXIAN; 9192

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

LD50 LC50 Mixture:LD50 (ORAL RAT) IS NOT APPLICABLE.

Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO

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

Health Hazar

ds Acute and Chronic:ACUTE: EVAPORATION OF THE LIQUID FROM THE SKIN CAN PRODUCE FROSTBITE-AVOID N2 LIQUID. IN HIGH CONCENTRATIONS THIS IS A SIMPLE ASPHYXIAN - DIZZINESS,SHORTNESS OF BREATH,UNCONSCIOUSNESS, OR SUFFOCATION CAN OCCUR.ANY COMPRESSED GAS CAN BE ATMECHANICAL HAZARDS. CAN CAUSE COMPRESSED AIR ILLNESS WITH CHRONIC OVEREXPOSURE

Explanation of Carcinogenicity:THIS MATERIAL IS NOT LISTED BY IARC, NTP, OR OSHA AS A CARCINOGEN.

Effects of Overexposure:FROSTBITE OR C HILLING OF SKIN FROM CRYOGENIC

LIQUID. GAS CANDISPLACE OXYGEN FOR BREATHING AND RESULT IN DIZZINESS SHORTNESS OF BREATH.

Medical Cond Aggravated by Exposure:NONE KNOWN

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

First Aid:TREAT FOR FROSTBITE IF NEEDED. IF BURNING OR ITCHING SENSATION OF EYES OCCUR, FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING LIDS OPEN AND SEEK MEDICAL ATTENTION. SKIN: WASH THE MATERIAL OFF THE SKIN WITH COPIOUS AMOUNTS OF SOAP AND WATER FOR AT LEAST 15 MINUTES. IF REDNESS, ITCHING, OR BURNING OCCURS, GET MEDICAL HELP. INHALE: REMOVE VICTIM TO FRESH AIR IN CASE OF OVERDOSE. GIVE MOUTH-TO-MOUTH ART IFICAL RESPIRATION IF NEEDED. GIVE OXYGEN IF BREATHING IS DIFFICULT.

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

Flash Point:NONE

Fire Fighting Procedures:GAS CYLINDERS ARE EQUIPPED WITH PRESSURE AND TEMPERATURE RELIEF DEVICES - REMOVE CYLINDERS FROM FIRE OR HIGH TEMPERATURE

TO AVOID DANGER OF RUPTURE.
Unusual Fire/Explosion Hazard:NONE REPORTED BY MANUFACTURER.

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

Spill Release Procedures:EVACUATE ALL PERSONNEL FROM RELEASE AREA.
VENTILATE TO OUTSIDE.
Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:PROTECT CYLINDERS FROM PHYSICAL
DAMAGE. STORE AWAY FROM EXTREME HEAT. KEEP CYLINDER VALVES CLOSED
WHEN
NOT IN USE AND WHEN EMPTY.
Other Precautions:DO NOT DEFACE CYLINDERS OR LABELS. HANDLE CYLINDERS
WITH PROPER CAUTION. STORE CYLINDERS IN A CLEAN, DRY, WELL
VENTILLATED AREA AWAY FR HEAT ABOVE 125F. KEEP CYLINDER CAPPED AND
SECURED AGAINST MOVEME NT WHEN NOT IN USE.

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

Respiratory Protection:SCBA MAY BE NEEDED FOR PROLONGED EXPOSURE.
Ventilation:LOCAL EXHAUST MAY BE NEEDED FOR CONFINED SPACE USE. GENERAL
MECHANICA
L VENTILATION IS ALWAYS RECOMMENDED.
Protective Gloves:WORK GLOVES FOR HANDLING CYLINDERS.
Eye Protection:APPROVED SAFETY GLASSES OR FACE SHIELD.
Other Protective Equipment:SAFETY SHOES AND HEARING PROTECTION.
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND
RECOMMENDED PROCEDURES. USE PROPER CARE WHEN HANDLING AND STORING
CYLINDERS.
Supplemental Safety and Health
SPECIAL GLOVES, FACE SHIELD, AND OTHER PROTECTIVE CLOTHING MAY BE
NEEDED IF HANDLING LIQUID. KEY: HMIS
RECORD COPIED FROM ANOTHER
HMIS RECORD FOR A NITROGEN CYLINDER FROM THE SAME MANUFACTURER.

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

HCC:G3
Boiling Pt:B.P. Text:-320F,-196C
Vapor Density:0.98 AIR=1
Solubility in Water:SLIGHT
Appearance and Odor:COLORLESS,ODORLESS GAS
Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES
CAN REACT VIOLENTLY WITH LITHIUM (LI), NEODYMIUM (ND)

AND TITANIUM (TI)

UNDER CERTAIN CONDITIONS.

Stability Condition to Avoid:NONE REPORTED BY MANUFACTURER

Hazardous Decomposition Products:NONE

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

Waste Disposal Methods:MOVE LEAKY CYLINDER TO OUTDOORS OR VENTILATED HOOD.ALLOW GAS TO DISCHARGE AT MODERATE RATE. DISPOSAL SHOULD BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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.