

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

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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 Hazard  
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 A MECHANICAL HAZARD. 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 CHILLING OF SKIN FROM CRYOGENIC LIQUID. GAS CAN DISPLACE OXYGEN FOR BREATHING AND RESULT IN DIZZINESS SHORTNESS OF BREATH.  
Medical Condition 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 ARTIFICIAL 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.

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