

ANSUL FIRE PROTECTION, WORMALD U.S.INC. -- CARBON DIOXIDE -- 4810-01-286-9764

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

Product ID:CARBON DIOXIDE

MSDS Date:01/12/1996

FSC:4810

NIIN:01-286-9764

MSDS Number: CDGYC

=== Responsible Party ===

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

Address:ONE STANTON STREET

City:MARINETTE

State:WI

ZIP:54143-2542

Country:US

Info Phone Num:715-735-7411...FAX 715-7

32-3477

Emergency Phone Num:715-735-7411...TOM LAWSON EXT 580

CAGE:03670

=== Contractor Identification ===

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:NINETECH INTL INC

Address:1064 ROSELLE PL

Box:City:WOODMERE

State:NY

ZIP:11598

Country:US

Phone:516-887-7943

CAGE:0GKF8

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

Ingred Name:CARBON DIOXIDE

CAS:124-38-9

RTECS #:FF64000

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Fraction by Wt: 100%
Other REC Limits:NONE SPECIFIED
OSHA PEL:5000 PPM
ACGIH TLV:5000PPM/30000STEL;96

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

LD50 LC50 Mixture:PRODUCT'S LD50 (ORAL RAT) WAS NOT STATED
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE-CONTACT WITH COLD VAPOR/SOLID
CARBON DIOXIDE CAN CAUSE EYE/SKIN FROSTBITE AND FREEZE BURNS.
ASPHYXIA BY INHALATION & HEAVIER THAN AIR. CAN CAUSE SUFFOCATION
BY REDUCING OXYGEN AVAILABLE. BREATHING HIGH CONCENTRATIONS WILL
CAUSE LIGHTEADEDNESS, SHORTNESS OF BREATH. INGESTION IS UNLIKELY.
CHRONIC-UNKNOWN.
Explanation of Carcinogenicity:MFR GAVE THE ABOVE LISTINGS ON THE MSDS
BUT NO OTHER COMMENTS WERE RECORDED.
Effects of Overexposure:DIZZINESS, IMPAIRED COORDINATION, REDUCED
MENTAL ACUITY, HEADACHES, TINNITUS, DIFFICULTY BREATHING, AND/OR
DROWSINESS DEPENDING ON LENGTH OF EXPOSURE & CONCENTRATIONS.
Medical Condition Aggravated by Exposure:RESPIRATORY PROBLEMS

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

First Aid:IF ANY IRRITATION PERSISTS OR SEVERE, GET MEDICAL ATTENTION.
TREAT FOR FROSTBITE IF NECESSARY. EYE-FLUSH W/WATER FOR 15 MIN.
SKIN-WASH W/SOAP & WATER. INHALED-REMOVE FROM CONTAMINATED AREA. IF
SYMPTOMS OCCUR, CONSULT MEDICAL PERSONNEL. AIDOR RESTORE BREATHING
AS NEEDED. INGESTED-MFR GAVE NO INFORMATION ON MSDS.

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

Flash Point:NONE
Extinguishing Media:THIS IS AN EXTINGUISHING AGENT. HMIS:USE
EXTINGUISHING MEDIA APPROPRIATE FOR SURROUNDING FIRE.
Fire Fighting Procedures:NONE - THIS IS AN EXTINGUISHING AGENT.
Unusual Fire/Explosion Hazard:THOUGH GAS CYLINDERS ARE EQUIPPED WITH
PRESSURE AND TEMPERATURE RELIEF DEVICES, THEY SHOULD BE REMOVED
FROM HIGH TEMPERATURES OR FIRE TO AVOID RISK OF RUPTURE.

===== Accidental Release

Measures =====

Spill Release Procedures:EVACUATE PERSONNEL. VENTILATE TO OUTSIDE
ATMOSPHERE. COOL OR REMOVE HOT, METAL SURFACES OR SOURCE OF NON-
EXTINGUISHED FLAMES.

Neutralizing Agent:MFR GAVE NO INFORMATION ON MSDS.

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

Handling and Storage Precautions:STORE IN A CEAN, DRY, WELL-VENTILATED
AREA AWWAY FROM HEAT ABOVE 120F. STORE AS A COMPRESSED GAS IN DOT
APPROVED VESSELS.

Other Precautions:IF NOT
ATTACHED TO A SYSTEM, CYLINDER/CARTRIDGE MUST
BE SAFETY CAPPED TO PROTECT AGAINST VIOLENT VELLEL MOVEMENT OR
FORCE OF EXCAPING GAS IF VALVE IS ACTUATED OR SEAL IS PUNCTURED.
NOTE INCOMPATIBILIT Y INFORMATION.

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

Respiratory Protection:NOT NORMALLY NECESSARY IF CONTROLS ARE ADEQUATE.
IF TLV IS EXCEEDED OR IF EXPOSURE IS PROLONGED, A SELF-CONTAINED
BREATHING APPARATUS IS RECOMMENDED.

Ventilation:MECHANICAL (GENE
RAL) VENTILATION IS RECOMMENDED W/LOCAL
EXHAUST RECOMMENDED FOR CONFINED SPACES.

Protective Gloves:FOR CONTACT W/DRY ICE

Eye Protection:CHEMICAL GOGGLES + FACE SHIELD

Other Protective Equipment:PROTECTIVE CLOTHING FOR CONTACT W/DRY ICE.

Work Hygienic Practices:MFR:?. HMIS:USE GOOD CHEMICAL HYGIENE
PRACTICES. AVOID CONTACT IF AT ALL POSSIBLE. WASH THOROUGHLY AFTER
HANDLING.

Supplemental Safety and Health

P/N ON CTDF: 17284; P/N GIVEN BY DDRV ON TECH SUPPORT SHEET: 17492.

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

HCC:G3

Boiling Pt:B.P. Text:SUBLIMES

Vapor Pres:42928 MMHG

Vapor Density:1.5

Spec Gravity:1.98

Evaporation Rate & Reference:GAS AT ROOM TEMPERATURE

Solubility in Water:APPRECIABLE

Appearance and Odor:COLORLESS GAS WITH NO ODOR.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

REACTS VIGOROUSLY W/(AL+NA2O2), CS2O, LI, K, MG(C2H5) 2, (MG+NA2O

),
KHC2, NA, NA2C2, NAK, TI
Hazardous Decomposition Products:NONE
Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND
FEDERAL ENVIRONMENTAL REGULATIONS.

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