

ANSUL FIRE PROTECTION, WORMALD U.S.INC. -- CARBON DIOXIDE -- 4210-00-134-8958  
===== Product Identification =====

Product ID:CARBON DIOXIDE  
MSDS Date:01/25/1993  
FSC:4210  
NIIN:00-134-8958  
MSDS Number: BNSXX  
=== 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

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

Ingred Name:CARBON DIOXIDE  
CAS:124-38-9  
RTECS #:FF6400000  
Fraction by Wt: 100%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:5000 PPM  
ACGIH TLV:5000PPM/30000STEL;94

===== Haza

Product 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. ASPHYXIANT BY INHALATION & HEAVIER THAN AIR. CAN CAUSE SUFFOCATION BY REDUCING OXYGEN AVAILABLE. BREATHING HIGH CONCENTRATIONS WILL CAUSE LIGHT

THEADEDNESS, 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 =====

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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.

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

Flash Point:NONE

Extinguishing Media:THIS IS AN EXTINGUISHING AGENT. HMT IS: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, M

ETAL 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 EXCAPIN

G 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 (GENERAL) VENTILATION IS RECOMMENDED W/LOCAL  
EXHAUST RECOMMENDED FOR CONFINED SPACES.

Protective Gloves:FOR CONTACT W/DRY ICE

Eye Prot

ection: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

NONE

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

HCC:G3

NRC/State Lic Num:NONE

Boiling Pt:B.P. Text:SUBLIMES

Vapor Pres:830 PSI

Vapor Density:1.5

Spec Gravity:1.98

Evaporation Rate & amp;

Reference:GAS AT ROOM TEMPERATURE  
Solubility in Water:88ML/100 ML  
Appearance and Odor:COLORLESS GAS W/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 =====  
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Waste Disposal Methods:DISPOSE OF I/A/W FEDERAL, STATE & LOCAL  
REGULATIONS.

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