COMPRESSED

ON195.4 O.S.

STERRANT FUMICANT CAS

ACTIVITING PROBLEM CHARLES

ON 195.4 O.S.

FLANMABLE

STERRANT FUMICANT CAS

ACTIVITING PROBLEM CHARLES

ON 195.4 O.S.

FLANMABLE

GAS

FLANMABLE

GAS

FLANMABLE

GAS

BEFORE USING PROBLET, READ WARNING LARGE OF CHARGES

BEFORE USING PROBLET, READ WARNING PROBLET, READ WA

05/01/57

STERILANT FUMICANT GAS

ACTIVE INGREDIENT CAMEGON DIOXIDE

THE CONTENTS OF LOS OF ORGE

FO

LICE SPECIALTY GASES

STERILARY - FUMICANT EAS

ACTIVE INGREDIENT LITHYLENE DXIDE

30% BY WEIGHT
INERT INGREDIENT CARBON DIOXIDE
70% BY WEIGHT
AFT CONTENTS 75 LPS 134 GKG1

RO

SPECIALTY GASES

OXYFUME® 30

STERILANT-FUMIGANT GAS ACTIVE INGREDIENT-ETHYLENE OXIDE 30% BY WEIGHT. INERT INGREDIENT-CARBON DIOXIDE 70% BY WEIGHT.

DANGER! EXTREMELY FLAMMABLE HIGH PRESSURE LIQUID AND GAS. MAY FORM EXPLOSIVE MIXTURES WITH AIR. HARMFUL IF INHALED CAUSES EYE AND SKIN BURNS.

- DANGER: CANCER HAZARD AND REPRODUCTIVE HAZARD.
- OTHER POSSIBLE DELAYED HEALTH EFFECTS may be nervous system injury, chromosomal changes, and cataracts
- EFFECTS OF OVEREXPOSURE may be nausea, vomiting, diarrhea, numbness, weakness, loss of muscle coordination, dizziness, drowsiness, convulsions, loss of consciousness, irritation of lungs, delayed lung injury (fluid in lungs), breathing difficulties, blisters on skin, allergic skin reaction. PEL 1PPM-TWA (ETHYLENE OXIDE) (OSHA-29CFR1910 1047)

ODOR: Ether-like at high concentrations

Keep away from heat, flame and sparks. Do not breathe vapor. Do not get in eyes, on skin or clothing. Use only in a closed system. Store and use with adequate ventilation. No part of the container may be exposed above 125°F (52°C). Close valve when not in use and when empty. Use in accord with tag attached to valve.

FIRST AID: IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call. a physicianN CASE OF CONTACT , immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physicial. Aerate, wash or clean contaminated clothing and discard leather goods

LEAK: Evacuate area and keep personnel upwind Shut off all sources of ignition. Use self-contained breathing apparatus and protective clothing, and shut off leak if without risk

FIRE: Do not extinguish burning gas if flow cannot be shut off immediately. Move container away from fire if without risk. Use water spray or fog nozzle to keep container cool

IN EMERGENCY: Cali CHEMTREC 800-424-9300.

BEFORE USING OR HANDLING THIS PRODUCT YOU MUST ALSO READ AND UNDERSTAND LINDE SAFETY PRECAUTIONS BOOKLET FORM L-3499 AND MSDS FORM L-4704.

> FOR INDUSTRIAL USE ONL 1 NOT FOR USE IN HOSPITALS OR IN HEALTH ARE FACILITIES

DOT Shipping Name Compressed Gas NOS UN1954 IMO Shipping Name: Carbon Dioxide and Ethylene Oxide Mixture, UN1041 CAS 75-21-8 (Ethylane Oxide) CAS 124-38-9 (Carbon Dioxide)

EPA Reg No 10330-11 EPA Est No 10330-

BATCH-

UND SPECIALTY GISTS

Union Carbide Corporation -- Linite Division, Daribury, CT 05817

DC NOT REMOVE THIS TAG



L-14-109

OXYFUME® 30

STERIL ANT-FUMIGANT GAS

ACTIVE INGREDIENT-ETHYLENE OXIDE 30% BY WEIGHT INERT INGREDIENT-CARBON DIOXIDE 70% BY WEIGHT

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling

DANGER-EXTREMELY FLAMMABLE

To be used only by persons experienced in Oxytume* 30 gas steritization and furnigation, or by persons under direct supervision of persons who are experienced in Oxytume* 30 gas steritization and furnigation. Use only in accordance with directions given on this tag and the safety precautions listed on the body label. See current Union Carbide Corporation, Linde Divisioni, Material Safety Data Sheet, Form L-4704, and safe practices booklet L-3499 for additional safety information.

GENERAL INFORMATION

 This cylinder is equipped with an eductor tube and is designed to discharge liquid.

2 The approximate vapor pressure exerted by this gas mixture will be 600 psig (4140 kPa) at 70°F (21.1°C) while liquid is present. Vapor pressure will be lower if temperature is below 70°F (21.1°C), higher if temperature is above 70°F (21.1°C).

 Cylinder must be in an upright position when discharging Cylinder must be secured to prevent falling over

4 Discharge value outlet is provided with a CGA 350 connection which has lefthand threads. Make sum value threads are undamaged. Do not attach ordinary pipe fittings to this value.

- 5 Use metal (except aluminum) fittings and piping or Teffon-lined tubing, capable of withstanding the pressure to be encountered insuali pressure relief device where liquid can be trapped between valves. Ethylene-propylene rubber and Teffon zie surtable materials for gaskets. Ground all equipment, including cylinder, to avoid static sparks.
- 6 Install check valves in the discharge line from this cylinder to processing equipment to prevent back flow into cylinder.
- 7 Open cylinder valve by turning handwheel counterclockwise. Never use a wrench or other leverage device to open or close cylinder valve.

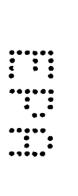
B STORAGE AND DISPOSAL

Return cylinder to supplier. Store according to instructions provided on label stid tag.

STERILIZATION

- 1 Use Onyturne⁴ 30 only in stenlizers designed for use with 30% by weight Ethylene Oxide and 70% by weight Carbon Dioxide
- Use Oxytume* 30 in accordance with directions supplied by the stanker manufacturer.
- 3 Signizer temperature and pressure influence both exposure time and Ethylene Oxide concentration. The variation of type and quantity of material to be sterilized, how packed, size of

(Continued on back)



sterilizer, types of bacteria to be follow, and chamber relative humidity also effect the exposure time required for sterilization. Gas sterilizer cycle parameters should be those prescribed by the sterilizer manufacturer, if applicable iff other cycle parameters are used, the efficacy of the alternate cycle must be validated a. * sithe responsibility of the user

- 4. Aerate sterilized materials before use
 - **FUMIGATION**
- FUNIGATION

 Furnigation with Oxyfume* 30 should be performed unly in vacuum or gastight chambers designed for use with 30% by weight Ethylene Oxide and 70% by weight Carbon Dioxide

 Writele furnigated area before entering. Aerale furnigated
- materials before use





Union Carbide Corporation Linde Division Denbury, Connecticut 06817-0001 Copyright © 1987 Union Carbide Corporation L-14-109 7/87 MM Printed in U.S.A. STT-0400

OXYFUME® 30

STERILANT-FUMIGANT GAS

ACTIVE INGREDIENT-ETHYLENE OXIDE 30% BY WEIGHT. INERT INGREDIENT-CARBON DIOXIDE 70% BY WEIGHT.

DANGER! EXTREMELY FLAMMABLE HIGH PRESSURE LIQUID AND GAS. MAY FORM EXPLOSIVE MIXTURES WITH AIR. HARMFUL IF INHALED. CAUSES EYE AND SKIN BURNS.

- DANGER: CANCER HAZARD AND REPRODUCTIVE HAZARD.
- OTHER POSSIBLE DELAYED HEALTH EFFECTS may be nervous system injury, chromosomal changes, and cataracts.
- EFFECTS OF OVEREXPOSURE may be nausea, vomiting, diarrhea, numbness, weakness, loss of muscle coordination, dizziness, drowsiness, convulsions, loss of consciousness, irritation of lungs, delayed lung injury (fluid in lungs), breathing difficulties, blisters on skin, allergic skin reaction.
 PEL: 1PPM-TWA (ETHYLENE OXIDE) (OSHA-29CFR1910.1047)

ODOR: Ether-like at high concentrations.

Keep away from heat, flame and sparks. Do not breathe vapor. Do not get in eyes, on skin or clothing. Use only in a closed system. Store and use with adequate ventilation. No part of the container may be exposed above 125°F (52°C). Close valve when not in use and when empty. Use in accord with tag attached to valve.

FIRST AID: IF INHALED, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physiciann CASE OF CONTACT, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Aerate, wash or clean contaminated clothing and discard leather goods.

LEAK: Evacuate area and keep personnel upwind. Shut off all sources of ignition. Use self-contained breathing apparatus and protective clothing, and shut off leak if without risk.

FIRE: Do not extinguish burning gas if flow cannot be shut off immediately. Move container away from fire if without risk. Use water spray or fog nozzle to keep container cool.

IN EMERGENCY: Call CHEMTREC 800-424-9300.

BEFORE USING OR HANDLING THIS PRODUCT YOU MUST ALSO READ AND UNDERSTAND LINDE SAFETY PRECAUTIONS BOOKLET FORM L-3499 AND MSDS FORM L-4704.

FOR INDUSTRIAL USE ONLY. NOT FOR USE IN HOSPITALS OR IN HEALTH CARE FACILITIES.

DOT Shipping Name: Compressed Gas N.O.S. UN1954

IMO Shipping Name: Carbon Dioxide and Ethylene Oxide Mixture, UN1041

CAS: 75-21-8 (Ethylene Oxide).

CAS: 124-38-9 (Carbon Dioxida).

EPA Reg. No. 10330-11

EPA Est. No. 10330-

BATCH-

1084 pm31

SPECIALTY GASES

COMPRESSED GAS N.O.S. UN1954

OXYFUME® 30

FLAMMABLE GAS

manufacture with the

ETEMANT PROMESTER OF ETHTREESE OFFICE ACTIVE INCRESSERY ETHTREESE OFFICE ACTIVE INCRESSERY CARBON GIOLOGE INCRESSERY WEIGHT 70% BY WEIGHT 70% BY WEIGHT 75 LBS. (34.0%)

RQ

SPECIALTY GASES

In Accordance with The Matical Busci Co. and the Matical Co. and t

COMPRESSED UNIOS N.O.S.

GXVFUME® 30

FLAMMABLE GAS STERNANT - FORMANT SAS

ACTIVE INGREDIENT - ETHYLENF OXIDE

INERT INGREDIENT - CARBON DIOXIDE 70% BY WEIGHT

NET CONTENTS - 75 LBS (34 QKg)



SPECIALTY GASES

COMPRESSED UNISSA N.O.S.

OXYFUME. 30

FLAMMABLE

STERNART - FRANKARY BAS ACTIVE INGREDIENT - ETHYLENE OXIDE 30% BY WEIGHT INERT INGREDIENT - CARBON DIOXIDE 70% BY WEIGHT

TOW BY WEIGHT NET CONTENTS - 75 LWS (34,049)



In Accordance with the Notice 22-2. Based on Draft Lololing rated

DO NOT REMOVE THIS TAG



L-14-109

OXYFUME® 30

STERILANT-FUMIGANT GAS

ACTIVE INGREDIENT-ETHYLENE CKIDE 30% BY WEIGHT INERT INGREDIENT-CARBON DICKIDE 70% BY WEIGHT

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

DANGER-EXTREMELY FLAMMABLE

To be used only by persons expenenced in Oxylume* 30 gas sterilization and furnigation, or by partons under direct superviaion of persons who are experienced in Oxylume* 30 gas sterilization and furnigation. Use only in accordance with directions given on this tag and the selety preclutions listed on the body label. See current Union Carbide Corporation, Linde Division, Material Selety Date Sheet, Form L-4704, and sale practices booklet L-3499 for additional salety information.

GENERAL INFORMATION

- 1. This cylinder is equipped with an eductor tube and is designed to discharge liquid.
- 2. The approximate vapor pressure everted by this gas midure will be 600 pag (4140 kPa) at 70°F (21.1°C) while liquid as present. Vapor pressure will be lower if temperature is below 70°F (21.1°C); higher if temperature is above 70°F (21.1°C)
- 3 Cylinder must be in an upright position when discharging. Cylnder must be secured to prevent talking over
 4. Discharge valve outlet is provided with a CGA 350 connection
- which has lefthand threads. Make sure valve threads are undamaged. Do not attach ordinary pipe fittings to this valve
- 5. Use metal (except aluminum) fittings and piping or Tellon-lined fulling, capable of withstanding the pressure to be encountered. Install pressure relief device where liquid can be trapped. between valves. Eshylene-propylene nubber and Tellon are autable materials for gashets. Ground all equipment, including cylinde: to avoid static sparks.
- 6. Install check velves in the discharge line from this cylinder to processing equipment to prevent back flow into cylinder.
- 7. Open cylinder valve by turning handwheel counterclockwise Never use a wrench or other leverage device to open or close
- 8. STORAGE AND DISPOSAL

Return cylinder to supplier. Store according to instructions provided on label and teo.

STEPALIZATION

- 1. Use Oxylume® 30 only in startizers designed for use with 30% by weight Emylane Oxide and 70% by weight Carbon Doxide.

 2. Use Onylams* 30 in accordance with directons supplied by
- the sterfizor manufactures,
- Sterilizer temperature and pressure influence both exposure time and Ethylene Oxide concentration. The veriation of type and quantity of meterial to be startized, how peched, size of

(Continued on back)





sterilizer, types of bacteria to be totted, and chamber relative humidity also effect the exposure time required for sterilization. Gas sterilizer cycle parameters should be those prescribed by the sterilizer manufacturer, if applicable. If other cycle parame-ters are used, the efficacy of the afternate cycle must be valdated and is the responsibility of the user 4. Aerale sterikzed materials before use

FUMIGATION

- Furnigation with Oxylume* 30 should be performed only in vacuum or gastight chambers designed for use with 30% by weight Ethylene Oxide and 70% by weight Carbon Dioxide.
 Ventilate furnigated area before entering. Aerate furnigated materials before use.





Union Carbide Corporation Linde Division Denbury, Connecticut 08817-0001 Copyright © 1967 Union Carbide Corporation

L-14-109 7/87 1M Printed in U.S.A. STT-0400

MAY 0 1 1987

Union Carbide Corporation Linde Division ',9 Old Ridgebury Road (R-4-678) anbury, CT 06817-0001

Attention: Algirdas G. Vilkas

Gentlemen:

Subject: Oxyfume-30

EPA Registration No. 10330-11

Your Amendment Application Dated February 19, 1987

The amendment referred to above, submitted in connection with registration under section 3(c)(7)(A) of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), is acceptable provided that you:

- 1. Submit/cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
- Make the labeling change listed below before you release the product for shipment bearing the amended labeling:
 - Add under the heading "Directions for Use" the following misuse statement:

It is a violation of Pederal law to use this product in a manner inconsistent with its labeling.

- 3. Submit an updated Confidential Statement of Pormula.
- 4. Submit five (5) copies of your final printed labeling before you release the product for shipment.

| 5YMBOL | ORIGIONATOR | | | | | | | |
|---------|-------------|--|---|--|--|--|---|--|
| SURNAME | | | ļ | | | | | |
| DATE | | | | | | | ! | |

OFFICIAL FILE COPY

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

A stamped copy of the label is enclosed for your records.

Sincerely yours,

John H. Lea Product Manager (31) Disinfectants Branch

Registration Division (TS-767C)

Enclosure

315

COMPRESSED UNIOS N.O.S. (XYFUME 30

BTERILANT - FUMBART BAR

ACTIVE INGREDIENT - ETHYLENE OXIDE

30H BY WEIGHT

INERT INGREDIENT - CARBON DIOXIDE

70% BY WEIGHT

NET CONTENTS - 75 LBS. (\$4.0Kg)

RQ

MUNDE SPECIALTY GASES

BEFORE USING PRODUCT, READ WARRING U

ACCEPTED with COMMENTS Letter Dated.

MAY 01 1987 Product De Production Incomments

Total to Control Townson Mr. 10330 Kindon ode Aut

1

FUMIGATION

*

à

 Fumipation with Oxylumes 30 must be performed only in vacuum or gastight chambers designed for use with 30% by weight Ethylene Oxide and 70% by weight Carbon Dioxide.

2. Ventilate furnigated area before entering. Assets furnigated materials before use.

Union Carbine Corporation—Linde Division, Danbury, CT 06817

SPECIALTY GASES

STT-0400 (8/88) (2/17)

STORAGE AND DISPOSAL

Return cylinder to supplier. Store according to instructions provided on label and tag.

ACCEPTED with COMMENTS in TPA Letter Dated:

MAY 01 1987

Under the Federal Investigate, Paravide, and it is served. Act go amended, for the pessions regenered under EPA Reg. No. 0330

OXYFUME® 30 STERILANT - FUMIGANT GAS

ACTIVE INGREDIENT - ETHYLENE OXIDE 30% BY WEIGHT INERY INGREDIENT - CARBON DIOXIDE 70% BY WEIGHT

DIRECTIONS FOR USE

DANGER - EXTREMELY FLAMMABLE

To be used only by persons experienced in Oxylume® 30 gas ateritization and fumigation, or by persons under direct supervision of persons who are experienced in Oxylumes 30 gas sterilization and furnigation. Use only in accordance with directions given on this tag and the safety precautions tisted on the body label. See current Union Carbide Corporation, Linde Division, Material Salety Data Sheet, Form L-4704 and sale practices booklet L-3499 (or additional) salely information.

GENERAL INFORMATION

1. This cylinder is equipped with an eductor tube and is de-

signed to discharge figuid.

 The approximate vapor pressure exerted by this gas mixture will be 600 psig (4140 kPa) at 70°F (21.1°C) while liquid is present. Vapor pressure will be lower if temperature is below 70°F (21.1°C), higher if temperature is above 70°F (21.1°C).

3. Cylinder must be in an upright position when discharging

Cylinder must be accurad to prevent falling over.
4. Discharge valve outlet is provided with a CGA 350 connection which has lefthand threads. Make sure valve threads are undamaged. Do not attach ordinary pipe fittings to this valve

Use metal (except aluminum) titlings and piping or Tellon-lined tubing capable of withstanding the pressures to be encountered Install pressure railed device where injurid can be trapped between valves. Ethylene-propylane rubber and Tallon are suitable materials for gaskets. Ground all equipment, including cylinder, to avoid static sparks.

Install check valves in the discharge line from this cylinder to processing equipment to prevent pack flow into cylinder

Open cylinder valve by turning handwheel cournerclockwise. Never use a wrench or other leverage device to open or close cylinder valve

STERILIZATION

1. Use Oxylumes 30 only in sterilizers designed for use wit -30% by weight Ethylene Oxide and 70% by weight Carbo-

Dioxide, Use Oxylumet 30 in accordance with directions supplied

by the sterilizer manufacturer.

3. Sterilizer temperature and pressure influence both exposure time and Ethylene Oxide concentration. The variation of type and quantity of material to be sterifized, how packed, aize of sterslizer, types of bacteria to be killed, and chamber relative humidity also effect the exposure time required for ateritization. Gas aterifizer cycle parameters should be those prescribed by the sterrizer manufacturer if applicable, if other cycle parameters are used the efficacy of the afternate cycle must be validated and is the responsibility of the user

4. Abrate sterritzed materials before use

BEST AVAILABLE COPY

ACTIVE INGREDIENT - ETHYLENE OXIDE'SCA BY WEIGHT. INERT INGREDIENT - CARSON DIOXIDE 70% BY WEIGHT. DANGERI EXTREMELY FLAMMABLE HIGH PRESSURE LIQUID AND GAS, MAY FORM EXPLOSIVE MIXTURES WITH AIR. HARMFUL IF INHALED. CAUSES EYE AND SKIN

BURNS. DANGER: CANCER HAZARD AND

or the triplant of the commence of the forest of the color of the following of the contract of the field of the color

- PEFFORMATIVE HAZARD

 OTHER POSSIBLE DELAYED HEALTH EFFECTS may be nervous system injury, chromosomal changes, and calaracts.
- EFFECTS OF OVEREXPOSURE may be nausea, vomiting, diarrhea, numbness, weathess, loss of muscle occidenation, dizziness, drowsiness, convulsions, loss of consciousness, irritation of lungs, delayed lung injury (lluid in lungs), breathing difficulties, blisters on skin, allergic skin reaction. PEL: IPPM-TWA (ETHYLINE OXIDE) (OSHA-29CFR1910.1047)

ODOR: Ether-like at high concentrations.

Keep away from heat, flame and sparks. Do not breather vapor. Do not get in eyes, on skin or clothing. Use only in a closed system. Store and use with adequate ventilation. No part of the container may be exposed above 125°F (52°C). Close valve when not in use and when empty. Use in eccord with lag attached to valve.

FIRST AID: Rinhaled, remove to fresh aid finot breathing, give artificial respiration, if breathing is difficult, give oxygen. Callo physicial disCASE OF CONTACT, ministrate, flush ever oractional planty of west rich as seasons. 15 minutes while removing contaminated of thing and shoes. Call a physician. Aerate, wash or clean contaminated clothing and discard leather goods.

LEAK: Evacuate area and keep personnel upwind. Shut off all sources of ignition. Use self-contained breathing apparatus and protective clothing, and shut off leak if without nak.

FIRE: Do not extinguish burning gas If flow cannot be shut off immediately. Move contains, away from fire if without risk. Use water apray or fog nozzle to keep container cool.

IN EMERGENCY: Call CHEMTREC 800-424-9300.

BEFORE USING OR HANDLING THIS PRODUCT YOU MUST ALSO READ AND UNDERSTAND LINDE SAFETY PRECAUTIONS BOOKLET FORM L-3499 AND MSDS FORM L- 4704.

FOR INDUSTRIAL USE ONLY. NOT FOR USE IN ROSPITALS OR IN HEALTH CAPE FACILITIES Union Carbide Corporation - Linde Devalor, Danbury, CT 06417

DOT Snipping Name Compressed Gas N.O.S. UN1854 IMO Shipping Hame Carbon Dioxide and Pahylene Oxide Clixture, UN 1041 CAS: 75-21-8 (Ethylene Oxide).

CAS: 124-38-9 (Carbon Bioxide). EPA Reg No 10330-11 EPA EM No. 10330-

\$18-0400 6/86

BATCH -

TILINDE SPECIALTY GASES

BONC! REMOVE THIS EAST

ACCEPTED b By Day of the

7

MAY 0 1 1937

constante fit errorant tar the many's