OXYFUME® 2002

ACTIVE INGREDIENT: ETHYLENE OXIDE 10.0%
OTHER INGREDIENT: CHLORODIFLUOROMETHANE 27.0%
OTHER INGREDIENT: CHLOROTETRAFLUOROETHANE 63.0%
KEEP OUT OF REACH OF CHILDREN 100.0%

DANGER

PELIGRO
PRECAUCION AL USUARIO: Si usted no lee Ingles, no use este producto hasta que la etiqueta la haya sido explicada ampliamente.

Users must follow the requirements of the OSHA occupational exposure standard for ethylene oxide (29 CFR 1910.147).

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS. DANGER LIQUID AND GAS UNDER PRESSURE. CAUSES EYE AND SKIN BURNS, HARMFUL IF INHALED. HARMFUL IF SWALLOWED. MAY CAUSE RESPIRATORY AND NERVOUS SYSTEM DAMAGE. DANGER! CANCER HAZARD AND REPRODUCTIVE HAZARD

EFFECTS OF OVEREXPOSURE: May be fatal if inhaled in high concentrations. May cause irritation of respiratory tract, chest tightness, headache, nausea, vomiting, diarrhea, light-headed feeling, dizziness, weakness, drowsiness, convulsions, coma, delayed lung injury (fluid in lungs), immediate or delayed skin irritation and blisters, allergic skin reaction.

OTHER POSSIBLE DELAYED HEALTH EFFECTS: May cause nervous system injury, catacaaths, adverse reproductive effects, chromosomal and mutagenic changes, and cancer.

PEL: 1PPM-TWA Ethylene Oxide (OSHA-29CFR1910.147)
EL: SPPM-exursion limit, 15 minutes.
ODOR: Ether-like at high concentrations. Exposure to toxic levels may occur without warning or detection by the user.
PRECAUTIONS: Do not breathe vapor. Do not swallow. Do not get in eyes, on skin, on clothing. Store and use with adequate ventilation in accordance with 29 CFR 1910.147.

PHYSICAL AND CHEMICAL HAZARDS
Contents under pressure. Use only in closed system. No part of the container may be exposed above 125°F (52°C). Close valve when not in use and when empty. Use in accordance with tag attached to valve.
WARNING: Contains HCFC-22 and HCFC-124. Substances which harm public health and the environment by destroying ozone in the upper atmosphere.

ENVIRONMENTAL HAZARDS
Ethylene oxide, the active ingredient in Oxyfume 2002, is not intended for outdoor use. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless this is specifically identified and addressed in an NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

FIRST AID
IN ALL CASES OF OVEREXPOSURE, GET MEDICAL ATTENTION IMMEDIATELY. TAKE PERSON TO DOCTOR OR EMERGENCY TREATMENT FACILITY AT ONCE.

IF INHALED, remove exposed person to fresh air, keep warm. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician even if no symptoms are present. Keep under medical observation. Symptoms may be delayed.

IN 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.

IF SWALLOWED, give at least 2 glasses of water. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Call a physician.

NOTE TO PHYSICIAN: REFER TO SECTION IV, FIRST AID MEASURES, HONEYWELL MATERIAL SAFETY DATA SHEET, OXYF-0008. TO OBTAIN MSDS, CALL 1-800-522-8001.

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

FIRE: Move container away from fire if without risk. Use water spray or fog nozzle to keep container cool.

IN CASE OF MEDICAL EMERGENCY CALL: 1-800-498-5701.

REFER TO TAG FOR COMPLETE USE DIRECTIONS.

BEFORE USING OR HANDLING THIS PRODUCT YOU MUST ALSO READ AND UNDERSTAND THE HONEYWELL MATERIAL SAFETY DATA SHEET FOR THIS PRODUCT.

FOR HEALTH CARE FACILITY AND INDUSTRIAL USE ONLY. DOT-E 10184

DOT/IMO Shipping Name: Liquefied Gas, N.O.S. (Chlorotetrafluoroethane, Chlorodifluoromethane, Ethylene Oxide)

US DOT Hazard Class: 2.2 US DOT ID Number: UN 3163
Ethylene Oxide CAS: 75-21-8 Chlorodifluoromethane CAS: 75-45-6 Chlorotetrafluoroethane CAS: 2837-89-0
EPA Registration No. 67470-8 EPA Establishment No. 67470-AZ-001

Honeywell
101 Columbia Rd., Morristown, NJ 07962-1053

BATCH-
DO NOT REMOVE THIS LABEL
MADE IN USA

STB-2002 (10/04)
OXYFUMG® 202
STERILANT-FUNGICIDAL/GAS
DANGER LIQUID AND GAS UNDER PRESSURE
HARMFUL IF INHALED
DIRECTIONS FOR USE

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

NOTE TO USER: When used in the workplace, it is the employer's responsibility to ensure that all personnel are briefed with and adhere to 29 CFR 1910.147. Oxyfumg 202 is a highly hazardous material and must be used only by personnel trained in its proper use. All personnel working with Oxyfumg 202 must have knowledge of the hazards of the chemical mixture and must be trained in the proper use of required respiratory equipment, monitoring and detection devices, and in the implementation of emergency procedures. To be used only by personnel experienced in Oxyfumg 202 sterilization and fumigation, or by persons, under direct supervision of persons who are experienced in Oxyfumg 202 sterilization and fumigation. Use only in accordance with the directions and the safety precautions listed on the label and this tag. Also see current Honeywell Material Safety Data Sheet for Oxyfumg 202.

STERILIZATION AND FUMIGATION

Oxyfumg 202 must be used only to sterilize medical and laboratory items, pests, mucocutaneous, asbestos packaging, and reduce microbial levels on cosmetics, artificials, archival material or library objects. Items to be sterilized must be thoroughly cleansed of soil before being placed in any type of sterilizer.

A. Oxyfumg 202 must be used only in facilities that meet the requirements of 29 CFR 1910.147 in non-sterile (commercial) vacuum or gas-light chambers designed for use with 15.5% ethylene oxide, 27.0% chloroformisothale and 62.9% chloroformisothale/ethane. Oxyfumg 202 must be used only by persons who have been trained in accordance with 29 CFR 1910.147. In hospitals and healthcare facilities, sterilization/fumigation with Oxyfumg 202 must be performed only in vacuums or gas-light chambers designed for use with Oxyfumg 202 that have FDA clearance and in accordance with directions supplied by the sterilizer manufacturer. After February 28, 2010, a single chamber process is required for ethylene oxide treatment (sterilization and fumigation) to occur in the same chamber in hospital and healthcare facilities.

NOTE: It is a violation of Federal Law to use Oxyfumg 202 Sterilant-Fungicidal Gas for the fumigation of textiles, clothing, fabrics, draperies, pillows, blankets, and other similar objects. In contact sterilization facilities, including facilities utilizing medical equipment and supplies, facility customers must be informed that sterilization/fumigation with Oxyfumg 202 must be performed only in vacuum or gas-light chambers designed for use with Oxyfumg 202. Safety and cross contamination training is required for all employees including office staff. Information must be provided to all employees in the facility at the time of initial assignment and annually thereafter.

The safety training must include, at a minimum, the following information:
1. the reactivity and properties of ethylene oxide in the facility;
2. the potential health effects from the levels of ethylene oxide in the facility;
3. the emergency response plan and how to respond in an emergency;
4. the availability of the Material Safety Data Sheet and other materials related to the health hazards of exposure to ethylene oxide.

In order to reduce ambient levels of ethylene oxide, lengthy facility sanitation is encouraged. If an area of potential long-term exposure is not directly involved in the ethylene oxide applications, air monitoring should include the entire facility including office space, break areas, and loading/unloading areas.

B. Oxyfumg 202 cycle parameters depend on several sterilizing/fumigating variable factors: (preconditioning of any, exposure time, chamber air concentration, ethylene oxide concentrations, chamber temperature, turndown level, and amount of air for sterilization/fumigation). In the chamber, microbubble challenge method, a desired level of fumigation was included to remove the desired occupancy from the sterilizing/fumigation agent. This information should be considered general and not as a replacement for detailed information issued by manufacturers.

C. The following is a list of inputs to the critical variables, which must be in parentheses for Oxyfumg 202 to be an effective sterilizing/fumigating agent. This information should be considered general, and not as a replacement for detailed information issued by manufacturers.

1. TEMPERATURES: 10°F "TO 137°F
2. PRESSURE: typically 15 to 25 inches of mercury. Use vacuums compatible with the products and packages to sterilize/fumigate.
3. MOISTURE: relative humidity of 50% to 90%.
4. GAS CONCENTRATION: 250 mg/l to 1300 mg/l, milligrams of ethylene oxide per liter of chamber volume.
5. EXPOSURE TIME: 48 minutes to 20 hours.

POST-FUMGING - Oxyfumg 202 is removed from the chamber and vented to an atmosphere containing ethylene oxide or gas delivery device. The internal ethylene oxide concentration must be in the range of 50% to 90%.

D. The sterilization/fumigation cycle parameters should be those prescribed by the sterilizing equipment manufacturer. If the cycle parameters are not, the safety and efficacy of the alternate cycle parameters must be validated and are the responsibility of the user.

E. Employees in facilities that use Oxyfumg 202 must comply with all the requirements for ethylene oxide use specified in 29 CFR 1910.147.
GENERAL INSTRUCTIONS
1. Always check cylinder valves and relief valves for leaks before moving cylinder into your facility.
2. This cylinder is equipped with an eductor tube for liquid delivery. Use vaporizing equipment to convert the liquid into a gas.
3. The approximate vapor pressure exerted by this gas mixture will be 2 psig (138 kPa) at 70°F (21°C), while liquid pressure; vapor pressure will be higher; temperature subzero 70°F (21°C); lower if temperature is below 70°F (21°C).
4. Cylinder must be in an upright position when discharging. Cylinder must be secured to prevent falling over.
5. Drain any valve outlet is provided with a CSA 510 connection which has left-hand threads.
6. Do not impose the gas plug and make sure valve threads are undamaged. The connection to the cylinder valve should be class CSA 510 connector. Use of other tools could cause damage to the brass cylinder valve. Do not attempt an ordinary pipe fitting to this valve.
7. All other piping and fittings should be steel or stainless steel, capable of withstanding the pressure to be encountered. Do not use rubber or plastic materials. Install relief device where liquid can be trapped between valves.
8. Install check valves in the discharge line from this cylinder to processing equipment to prevent back-flow into cylinder.
9. To open cylinder valve, turn handwheel counterclockwise. Do not use a wrench or other leverage device to open or close cylinder valve.
10. Use with adequate general and local ventilation.
11. Determine the quantity of product withdrawn from this cylinder by using an appropriate scale.

STORAGE AND DISPOSAL
Do not contaminate food, feed, or water by storage and disposal.

PESTICIDE STORAGE
Store according to instructions provided on label and this tag. Store away from heat in an area with adequate ventilation. Do not store in direct sunlight. To minimize polymer growth, Odylene 3020 must not be stored in any place where the temperature consistently exceeds 70°F. To control ethylene oxide polymer growth, use all flammable gas or a freezer. Freeze blast.

PESTICIDE DISPOSAL
Pesticide waste are acutely hazardous. Improper disposal of excess pesticide, spray, or mixture of mixes is a violation of Federal Law. If these wastes cannot be disposed of by your according to label instructions, contact your local Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL
Refillable container. Refill this container only with a non-flammable ethylene oxide mix. Do not reuse this container for any other purpose. Peruse container to supplier for reuse, before returning container to supplier.
A. Replace valve plugs tightly in valve outlets. If valve plugs are not available, contact supplier.
B. Check container valves and plugs for leaks prior to shipment. If leaks are detected, contact supplier.

PATENT INFORMATION
This product and its use for sterilization are protected by U.S. Patent 6,790,313. The purchase of this product gives you a license under the patent for single use only, and subsequent use constitutes patent infringement. Any misuse of this product, or unauthorized recondensing (which may not meet all stringent requirements), is potentially unseal and will violate the license terms granted to you upon sale of this product.