

Pesticide Exemption Request.

Dept: Facilities / Public Works IPM Coordinator: Joe Gonzales

Phone: 897-7392

Pesticide Applicator (employee or company) Name: Lenz Pest Control Phone: 962-9151

Application Site: Rental Truck Specific Location: City Annex Lot

Date(s): 3/31/15 Product Name: MasterFume

Active Ingredient: Sulfuryl fluoride..... 99.8%

Number of Applications: One-time Other

Type: Emergency Trial Programmatic Other Curative

Product type: Herbicide Insecticide Fungicide Other Fumigant

Application: Ornamental Turf Golf Vector Control Park Tree
 Street Tree Right of Way Vertebrate pest Other Structural Pest Control

Is the pesticide on the *Tiered Materials List*? No Yes If yes, provide the Tier

If the pesticide is not on the *Tiered Materials List*, provide the following screening information. See the IPM Strategy and the *Tiered Materials List* for instructions on screening the pesticide.

EPA Reg # 19713-596 Signal Danger Estimated Tier 1

Restricted c No Yes/Describe _____

P Waste _____ PBT _____ WA PBT _____ Persistent _____

Mobil _____ Cancer _____ Repro _____ Neuro _____

Endocrine _____ Bird _____ Fish _____ Bees _____

Wildlife _____

c Attach product label and MSDS to this form.

Describe the pest problem.

Bedbugs in furniture at Library

Describe the management goals and objectives for this site.

The management goal is to eliminate bedbugs in furniture

What is the damage threshold for this pest at this site?

Unknown

Describe the monitoring of the pest and potential predators that was conducted and the control methods previously used at the site.

Bedbugs were discovered in furniture by canine.

Describe how the product would be applied including frequency, concentration, and method of application.

Fumigation of truck holding all affected furniture.

What non-target impacts are anticipated?

No non-target impacts are anticipated.

How does the use of this product help achieve the site management goals? Note if this is curative or preventative.

This is a curative effort

How will the effectiveness of this product be monitored? Include expected results and indicators of success.

A re-inspection by canine of the furniture is recommended

Describe site conditions, for example consider the following: restricted access, distance from a creek or body of water, degree of runoff, site is a pesticide-free zone, etc.

No site conditions present problems.

List alternatives considered, alternatives implemented and why they were eliminated.

The alternative would be to fumigate entire library.

Justification: describe why is applying this pesticide is the best solution and why a less-hazardous chemical, non-chemical option or taking no action is not feasible.

Fumigation is the only 100% way to treat furniture for bedbugs. All other treatments pose a risk of not working.

Was outside expertise utilized? No Yes / Describe Lenz Pest Control and US Detection Dogs were used.

Describe future plans to prevent using the chemical again.

There is no preventative method to stop bedbugs. Homeless people can bring new bedbugs in at any time.

Signatures

Santos M. Escobar
Department IPM Coordinator

Santos M. Escobar
City IPM Coordinator

RESTRICTED USE PESTICIDE

(Due to Acute Inhalation Toxicity of Sulfuryl Fluoride)

FOR SALE TO AND USE ONLY BY CERTIFIED APPLICATORS OR PERSONS UNDER THEIR DIRECT SUPERVISION AND ONLY FOR THOSE USES COVERED BY THE CERTIFIED APPLICATOR'S CERTIFICATION. AN APPLICATOR CERTIFIED BY THE STATE AND ONE TRAINED PERSON MUST BE PRESENT ON SITE AT ALL TIMES DURING INTRODUCTION OF FUMIGANT, REENTRY PRIOR TO AERATION, AND DURING THE INITIATION OF THE INITIAL AERATION PROCEDURE WHEN EXPOSURE EXCEEDS 1 PPM.

Drexel

MASTER FUME[®]

Specialty Gas Fumigant

For control of: Existing infestations of listed insects and related pests such as (or including) Bed bugs, the larvae and adults of Carpet beetles (except egg stage), Clothes moths, Cockroaches (American, Brown-banded, Oriental cockroaches), Death watch beetles, Drywood termites, Formosan termites, Old house borers, Powder post beetles, Rodents (rats, mice).

For use in dwellings (including mobile homes), Buildings, Construction Materials, Furnishings (household effects), Shipping containers and Vehicles including automobiles, buses, passenger railcars, recreational vehicles (but not including aircraft), and surface ships.

ACTIVE INGREDIENT:

Sulfuryl fluoride	99.8%
OTHER INGREDIENTS:	0.2%
TOTAL:	100.0%

KEEP OUT OF REACH OF CHILDREN

DANGER  **PELIGRO**
POISON  **VENENO**

Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

See **FIRST AID** Below

EPA Reg. No. 19713-596

EPA Est. No. 19713-CA-1

Net Content: 125 Lbs.

FIRST AID

IF INHALED:

- Get exposed person to fresh air.
- Keep warm and at rest.
- Make sure person can breathe freely.
- If breathing has stopped give artificial respiration.
- Do not put anything in the mouth of an unconscious person.
- Call a poison control center or doctor for further treatment advice.

IF LIQUID IS ON SKIN OR CLOTHING:

- Immediately apply water to contaminated area of clothing before removing.
- Once area has thawed, remove contaminated clothing, shoes, and other items covering skin.
- Wash contaminated skin area thoroughly or shower.
- Call a poison control center or doctor for treatment advice.

IF LIQUID IS IN EYES:

- Hold eye open and rinse slowly and gently with water for 15 to 20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

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(Cont.)

In all cases of overexposure, such as nausea, difficulty in breathing, abdominal pain, slowing of movements and speech, numbness in extremities, get medical attention immediately. Take person to a doctor or emergency treatment facility. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

Note to Physician: This product is a gas which has no warning properties such as odor or eye irritation. (However, chloropicrin is used as a warning agent and is a known lachrymator). Early symptoms of exposure to this product are respiratory irritation and central nervous system depression. Excitation may follow. Slowed movement, reduced awareness, and slow or garbled speech may be noted. Prolonged exposure can produce lung irritation, pulmonary edema, nausea, and abdominal pain. Repeated exposure to high concentrations of this product can result in significant lung and kidney damage. Single exposures at high concentrations have resulted in death. Treat symptomatically. The liquid form of this product in the eye may cause damage due to refrigeration or freezing.

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

DANGER: Fatal if inhaled. May be fatal if swallowed. Extremely hazardous liquid and vapor under pressure. Liquid may cause freeze burns of exposed skin.

Do not get in eyes, on skin, or on clothing. This product is an odorless gas fumigant. Exposure to toxic levels may occur without warning or detection by the user.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Protective Clothing

Wear splash-resistant goggles (goggles designed and made of material that allows no measurable movement of the liquid pesticide being used to pass through them during use) or full face shield for eye protection during introduction of the fumigant. Do not wear gloves or rubber boots. Do not reuse clothing or shoes that have become contaminated with this product until thoroughly aerated and cleaned.

Respiratory Protection

If the concentration of this product in the breathing zone of the fumigated area (as measured by a detector device with sufficient sensitivity such as an INTERSCAN, MIRAN or SF-ExplorIR™) does not exceed 1 ppm (4 mg/cubic meter), no respiratory protection is required. (A breathing zone is defined as the area within a structure

(Continued)

Manufactured For:

Drexel Chemical Company

P.O. BOX 13327, MEMPHIS, TN 38113-0327

SINCE 1972

PRECAUTIONARY STATEMENTS (Cont.)

where individuals typically stand, sit or lie down.] If the concentration of this product is greater than 1 ppm, further aeration and re-testing is required. When this concentration is exceeded or when concentration is unknown, all persons in the exposed area must wear a NIOSH or MSHA approved positive pressure self-contained breathing apparatus (SCBA, not SCUBA) or combination air-supplied/SCBA respirator such as manufactured by Draeger, Ranger, Survivair, Scott or MSA. Before using any make or brand of SCBA, learn how to use it correctly. Determine that it has an adequate air supply for the job at hand, that it fits properly, providing an adequate seal around the face and that it is in good working order. For more detailed information on the source and use of air monitoring devices and respirators, consult the Manual For Structural Fumigation of this product.

Notice: Read the entire label. Use only according to label directions. Before buying or using MASTER FUME, read "WARRANTY DISCLAIMER". In case of emergency endangering health or the environment involving this product, call 1-877-208-2593. If you wish to obtain additional product information call Drexel Chemical Company at (901) 774-4370.

Agricultural Chemical: Do not ship or store with food, feed, drugs or clothing.

INFORMATION

APPLICATION PERSONNEL MUST PARTICIPATE IN DREXEL CHEMICAL'S SULFURYL FLUORIDE TRAINING AND STEWARDSHIP PROGRAM, MASTER TRAIN.

The Manual For Structural Fumigation is part of the labeling for this product.

Read the label before using this product. Follow all label precautions and directions. Prior to the parties entering into a fumigation agreement, the Fact Sheet for this product must be provided to an adult occupant of the structure to be fumigated.

This product is a highly hazardous material. Only individuals knowledgeable of the hazards of this chemical and trained in the use of required respiratory equipment, detector devices, emergency procedures, and in the proper use of this fumigant are allowed to use this product.

DIRECTIONS FOR USE

RESTRICTED USE PESTICIDE

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

When fumigating, observe local, state and federal rules and regulations including the use of the warning agent, chloropicrin, clearing devices, positive-pressure self-contained breathing apparatus, security requirements, and placement of warning signs.

USE RESTRICTIONS

When used for fumigation of enclosed spaces, such as boxcars, chambers, houses and other structures, ships, and other transport vehicles, trucks, warehouses, vans, vaults, two persons trained in the use of this product must be present at all times during introduction of fumigant, reentry prior to aeration, and during the initiation of the initial aeration procedure when exposure within the breathing zones exceeds 1 ppm. At least one person must be an applicator that is licensed/certified by the state. Two persons, however, need not be present if monitoring is conducted remotely (outside the area being fumigated) and no one enters the fumigated structure.

Do not apply when temperature at site of pest activity is below 40°F if fumigation is intended for control of insect pests. Measure the temperature at the coolest site of pest activity. The coolest site may be at the slab foundation, sub-floor soil, or other areas. This restriction does not apply when this product is used to control rodents.

When fumigating connected structure or structures attached by means physically capable of transmitting gas, all attached units will be regarded as fumigated space. Therefore, all units will be vacated, items that must be bagged or removed will be handled accordingly, and all entrances will be posted and secondarily locked.

Chloropicrin must be used according to the label requirements in the fumigated space(s).

PREPARATION FOR FUMIGATION

Chamber Fumigation

Use a tightly sealed chamber with adequate circulation for chamber fumigation.

Construction Materials, Furnishings (Household effects), Shipping containers and Vehicles Fumigation

Follow preparations as appropriate for chamber, taped fumigation, or tarpaulin fumigation to assure good confinement of the gas for the specified period of exposure.

Structural Fumigation

Remove from the structure to be fumigated all persons, domestic animals, pets, and desirable growing plants. Remove fish tank containing live fish, or remove the fish, or develop a plan for preparing the tank for fumigation. If necessary, exclude water in the tank and biological filters, if present, from the fumigated space by sealing with gas resistant tarps or sheeting. If water aeration is required during the fumigation, provide fresh air from outside the fumigated space for the tank aerator. Remove mattresses (except waterbeds) and pillows completely enveloped in waterproof covers or remove covers (or open seal of waterproof covers). Food, feed, drugs, tobacco products, and medicinals (including those items in refrigerators and freezers) can remain in the structure if they are in unopened plastic, glass or metal bottles, cans, or jars with the original manufacturer's air-tight seal intact. Food, feed, drugs, tobacco products, and medicinals (including those items in refrigerators and freezers) not in plastic, glass or metal bottles, cans, or jars with the original manufacturer's air-tight seal intact, need to be removed from the fumigation site, or double bagged in Master Fume bags, Nylofume® bags or Fumiguard bags, which are available from distributors of these products. Opened items that do not need to be removed or sealed in Nylofume bags include dental hygiene products (including toothpaste, mouthwash, dental adhesives, and dental whitening products), cosmetics including lipstick, all externally applied lotions and ointments, ice and water.

Open operable internal doors, internal openings to attics and sub-areas, storage chests, cabinets, drawers, closets, and appliances (such as washers, dishwashers, dryers, microwave or conventional ovens, etc.). Using electric fan(s) will help provide for forced distribution and aeration of basements and other dead air spaces to facilitate rapid dispersion of gas. Refrigerator and freezer doors may be left open if the units are turned off or disconnected and all food items have been removed. If the applicator chooses to leave sealed food items in closed refrigerators and freezers during the fumigation, the appliances must be opened when clearing the structure until the concentration of this product in them is 1 ppm or less.

Extinguish all flames, including pilot lights of water heaters, gas refrigerators, ranges, ovens, broilers, dryers, gas fireplaces, etc. Turn off or unplug all electrical heating elements such as those in heaters, pianos, organs, etc. Shut off automatic switch controls for appliances and lighting systems which will be included in the space to be fumigated.

Multi-Unit Structures: When fumigating a single unit/room within a larger structure (such as townhouses, apartments, condominiums), all units of the entire structure must be prepared as a fumigated structure, and all applicable rules, regulations and label instructions apply, such as occupant notification, structure preparation, posting, securing and aeration. An adult occupant of each currently-occupied unit must be provided with the Fact Sheet for this product. Ensure that all exterior doors providing access to individual units are secured with secondary locks (see Securing Structure Entrances) so that only the state licensed applicator in charge can gain access. Chloropicrin need only be used in the fumigated space where Master Fume is introduced. During Step(3) of Aeration Procedure 1 or 2, check all units within the fumigated structure for concentration of this product with an approved clearance device. If the concentration of this product is greater than 1 ppm in the breathing zone in a unit, ventilate the unit with operable doors and windows open until concentration in the breathing zones in all units is 1 ppm or less. A breathing zone is defined as the area in a structure where individuals typically sit, stand or lie down.

Connected Structures: A connected structure is defined as any structure connected with the structure to be fumigated by construction elements (e.g., pipes, conduits, ducts, etc.) which may allow passage of fumigant between the structures. If state rules and regulations do not describe or permit a process to isolate and seal a connected structure to prevent passage of fumigant from the fumigated structure, then the connected structure must be vacated during the fumigation. When it is necessary to vacate any connected structure, that structure shall be considered as a fumigated structure and all applicable rules, regulations and label instructions apply, such as occupant notification, structure preparation, posting, securing, and aeration. Chloropicrin need only be used in structures where Master Fume is introduced.

Concentration levels of this product must be measured in the breathing zones (see *Aeration and Reentry*) in any connected space or structure to confirm concentrations are 1 ppm or less before structure can be reoccupied. A breathing zone is defined as the area within a structure where individuals typically stand, sit or lie down.

Surface Ships in Port Fumigation

Surface ships in size up to and including large ocean-going ships may be fumigated with this product to control the various pests listed. The professional fumigator and the ship's captain (or owner) shall follow all applicable regulations including those listed in the Coast Guard, Department of Transportation, Title 46, Shipping Section, Parts 147A.1-147A.43. No people, plants, or pets may be onboard during fumigation except for those persons involved in fumigation. The person responsible for the fumigation must notify the master of the vessel, or his representative, of the requirements relating to personal protection equipment and detection equipment. Emergency procedures, cargo ventilation, periodic monitoring and inspections, and first aid measures must be discussed with and understood by the master of the vessel or his representative.

If leakage of the fumigant is detected, the person in charge of the fumigation shall take action to correct the leakage, or shall inform the master of the vessel, or his representative, of the leakage so that corrective action can be taken.

Food, feed, drugs, tobacco products and medicinals shall not be exposed to the chemical. If not removed from the vessel, they shall be protected from exposure. The vessel must not be moved during fumigation and aeration periods. If reentry is necessary before aeration is completed, positive pressure self-contained respiratory protection must be worn.

Tarpaulin Fumigation

Open operable windows as permitted by local and state regulations. When tarping, use a highly resistant material such as a vinyl coated nylon or polyethylene sheeting of at least 4 mil thickness. Seal all seams. Seal the bottom edges of the cover to the ground using materials (such as soil, sand, or weighted "snakes"). If needed, wet soil outward from foundation to the cover if soil is not sufficiently moist to act as a barrier for the gas to minimize escape of gas through the soil and to avoid injury to nearby plants.

Taped Fumigation

For fumigation sites that can be sealed with plastic or tape, seal adequately around doors, windows, vents, and other openings.

Warning Agent

Chloropicrin is a warning agent introduced into the structure during fumigation. It causes smarting of the eyes, tears, and discomfort, and has a very disagreeable pungent odor at very low concentrations. Chloropicrin must be used by a person certified to apply this fumigant or under their supervision.

In order to avoid direct exposure to the fumigant being released, chloropicrin must be released within the structure at least **5 to 10 minutes prior to introduction of the fumigant**. Place a handful of wicking agent, (e.g., cotton) in a chloropicrin evaporation container. Do not use chloropicrin evaporation containers or application equipment made of magnesium, aluminum, or their alloys, as chloropicrin may be severely corrosive to such metals. To enhance the distribution of chloropicrin throughout the structure, place the chloropicrin evaporation container in the air stream of a fan. Pour chloropicrin over the wicking agent. When adding chloropicrin to evaporation containers, dispense no more than 3 fluid ounces per container. Use 1 fluid ounce per 10,000 to 15,000 cubic feet – (30 ml per 283 to 425 cu. m.) of space to be fumigated or follow dosage rate calculated by the electronic Master Fume Calculator system. Establish at least one chloropicrin introduction site for each 45,000 cubic feet of space to be fumigated. When applying chloropicrin at multiple chloropicrin introduction points within a structure, start at the point farthest from the exit and work toward the exit. Removal of all chloropicrin evaporation containers from the fumigated space during the initial phase of aeration will aid in the dissipation of the warning agent from the structure.

Chloropicrin need not be used when fumigating railcars; however, a thorough walk-through inspection must be performed of each railcar with doors being immediately locked upon leaving each car, and a guard must be posted during fumigant introduction, exposure period, and aeration.

Applicators must observe the chloropicrin precautionary statements and personal protective equipment appearing on this label. See

Chapter 6, the *Warning Agent* section, of the Manual For Structural Fumigation of this product.

PREFUMIGATION CHECK

Check for potential leaks.

SECURING STRUCTURE ENTRANCES

To secure the structure against unauthorized entry during the fumigation exposure period and Step 2 of Aeration Procedure 1 or 2, use a locking device or barricade on all exterior door or doorways. A locking device, such as a secondary lock, or barricade must be demonstratively effective in preventing an exterior door or doorway from being opened from the exterior using normal opening or entering processes by anyone other than the certified applicator in charge of the fumigation or persons in his/her on-site direct supervision. Consult state and local regulations for any supplementary instructions and restrictions on secondary locks.

DOSE AND TIME OF EXPOSURE

To control drywood termites and non-egg stages of other listed insect and related structural and household pests, Drexel Chemical's Master Fume Calculator is to be used for the coordination of fumigant rates with soil or slab temperature, exposure period, and fumigant loss rate measured as half-loss time (HLT).

When control of the egg stage is desired or when fumigating for Formosan termites, use the following multiple factor of the drywood termite dosage as determined by Drexel Chemical's Master Fume Calculator for pests listed in the following table:

Pest	Dosage Factor (as a multiple of drywood termite dosage)
Rodents ¹	0.5X
Carpet Beetles ² and Cockroaches ²	1X
Furniture Carpet Beetles ² and Bed bugs	3X
Old House Borers and Formosan Termites	4X
Clothes Moths	6X
Powder Post Beetles and Death Watch Beetles	10X

¹ To determine the proper dose for rodent control, use 80°F as the calculating temperature. Unlike insects, rodents are warm blooded and do not require increased dosages at lower temperatures. At least 36 ounce-hours must be accumulated, regardless of temperature, for successful rodent fumigation.

² More than one fumigation may be needed to control the infestation after egg hatch.

Do not use less than the specified dosage factors when treating for rodents, cockroaches, bed bugs and termites. These dosages apply to dwellings, buildings, construction materials, furnishings, and vehicles. To control rodents, use sufficient gas to accumulate at least 36 ounce-hours following equilibrium, regardless of ambient air temperature. Refer to the Manual For Structural Fumigation of this product.

Drexel Chemical's Master Fume Calculator is a program that requires entry of key information to determine the dosage and amount of this product to be used. Consult the Manual For Structural Fumigation of this product for more details. Before Drexel Chemical's Master Fume Calculator program can be used, contact your Drexel Chemical Company representative on how to activate the program for calculating dosage. Drexel Chemical's Master Fume Calculator program may be modified and updated from time to time; please contact your Drexel Chemical Company representative for more information.

RELEASING THE FUMIGANT

Release the fumigant from outside of the fumigated space. The release point(s) should be into a large open space(s) in the fumigation site(s). Release the fumigant through a suitable leak-proof tube with a minimum burst pressure of 500 psi. Direct the fumigant into the blast of air from a fan(s) having a capacity of at least 1000 cubic feet per minute (cfm) for each pound of this product released per minute. Damage to household materials can occur if insufficient fan capacity is used for releasing the rate of this product. Protective sheeting, such as polyethylene plastic under the shooting stand, shooting hose, and shooting fan can be used to further protect floors during application.

Use Restrictions: Do not apply fumigant directly to any surface to prevent damage.

POSTING OF FUMIGATED AREAS

The applicator must post all entrances to the fumigated areas with signs bearing the following:

1. The signal word DANGER/PELIGRO and the SKULL and CROSSBONES symbol.
2. The statement, "Area under fumigation, DO NOT ENTER/NO ENTRE".
3. The date of fumigation.
4. Name of fumigant used.
5. Name, address, and telephone number of the applicator.

Only a certified applicator may authorize removal of placards, and only when the concentration of this product in the breathing zone of the treated site is 1 ppm or less. A breathing zone is defined as the area within a structure where individuals typically stand, sit or lie down.

AERATION AND REENTRY

No one is allowed in treated areas if the level of this product exceeds 1 ppm in the breathing zone. A breathing zone is defined as the area within a structure where individuals typically stand, sit or lie down.

During the initial one hour aeration procedure, required respiratory protection must be worn until the concentration of this product is confirmed not to exceed 1 ppm by detection device of sufficient sensitivity. Since the INTERSCAN, MIRAN or SF-ExplorIR gives immediate readings, respiratory protection is not required when clearing with these instruments after having completed the initial 1 hour aeration procedure. If a reading indicates levels above 1 ppm, leave the affected area immediately.

Detection devices of sufficient sensitivity, such as the INTERSCAN, MIRAN or SF-ExplorIR, can be used to confirm a concentration of 1 ppm or less of this product. Prior to using the devices to clear a structure for reoccupancy, follow the manufacturer's directions for filling the internal air bag for the ExplorIR and for zeroing the meters for the Interscan and MIRAN analyzers. The devices must be calibrated according to manufacturer's instructions. The concentration of this product must be monitored in breathing zones. Structure must remain posted for fumigation until cleared for reentry.

Open all operable doors and windows including doors between the attached garage and structure. Open all operable attic doors and accesses and direct the air flow of a fan into the attic. If the structure has a central air handling system, activate the fan (or blower) for each unit if operational or as an alternative, a fan may be placed in front of a system inlet to blow air into central heating or cooling ducts.

Select the appropriate procedure based on the fumigation rate:

All structures fumigated at 16 ozs./MCF or less may be aerated using Aeration Procedure 1 or 2.

All structures fumigated at concentrations greater than 16 ozs./MCF must be aerated using Aeration Procedure 2.

Aeration Procedure 1

These steps must be completed in succession.

Step 1: Aerate structure with all operable windows and doors open, aided by the use of 1 or more fans, for a minimum of 1 hour. Total fan capacity, using one or more fans, shall be capable of displacing a total of 5,000 cfm.

Step 2: Secure structure and do not allow reentry for a minimum of 6 hours from the start of aeration (first opening of the seal). During this time, structures must remain posted.

Step 3: After the minimum 6 hour waiting period, measure the concentration of this product in breathing zones of each room. If the concentration of this product is greater than 1 ppm, further aeration and re-testing are required. If the concentration of this product is above 1 ppm, ventilate structure with operable doors and windows open. Structure may be reoccupied when concentration of this product is 1 ppm or less in the breathing zones.

Aeration Procedure 2

These steps must be completed in succession.

Step 1: Aerate structure with all operable windows and doors open, aided by the use of 1 or more fans, for a minimum of 1 hour. Total fan capacity, using one or more fans, shall be capable of displacing a total of 5,000 cfm.

Step 2: Secure the structure and do not allow reentry for a minimum of 8 hours from the start of aeration (first opening of the seal). During this time, the structure must remain posted.

Step 3: After the minimum 8 hour waiting period, measure the concentration of this product in breathing zones of each room. If the concentration of this product is greater than 1 ppm, further aeration and re-testing are required. If the concentration of this product is above 1 ppm, ventilate structure with operable doors and windows open. Structure may be reoccupied when the concentration of this product is 1 ppm or less in the breathing zones.

For more detailed information on the source and use of air monitoring devices or respirators, consult the Manual For Structural Fumigation of this product. Do not reoccupy fumigation site, i.e. building, ship, vehicle or chamber, or move vehicle until aeration is complete. Warning signs must remain posted until aeration is determined to be complete and it is safe for reentry.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE: Store in dry, cool, well ventilated area under lock and key. Post as a pesticide storage area. If the storage area is in an occupied building, the storage area must have either 1) a forced air ventilation system that meets required local ordinances for the storage of hazardous materials and operates continuously; or 2) be equipped with a permanently mounted and properly maintained and functioning sulfuryl fluoride monitoring device designed to alert occupants of the building if sulfuryl fluoride in the air of the storage area is greater than 1 ppm. Store cylinders upright secured to a rack or wall to prevent tipping.

PESTICIDE HANDLING:

Do not subject cylinders to rough handling or mechanical shock such as dropping, bumping, dragging, or sliding. Do not transport any cylinders in closed vehicles where they occupy the same common airspace as personnel. Transport securely only in an upright position.

Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use.

When cylinder is empty, close valve, screw safety cap onto valve outlet, and replace protection bonnet before returning to supplier. Only the registrant is authorized to refill cylinders. Do not use cylinder for any other purpose. Follow registrant's instructions for return of empty or partially empty cylinders.

LEAK PROCEDURES: Evacuate immediate area of leak. Use a NIOSH or MSHA approved positive pressure self-contained breathing apparatus (SCBA, not SCUBA) or combination air-supplied/SCBA respirator, such as manufactured by Ranger, Survivair, Scott, or MSA, for entry into affected areas to correct problem. Move leaking or damaged cylinder outdoors or to an isolated location, observing strict safety precautions. Work upwind if possible.

Do not permit entry into leakage area by unprotected persons until concentration of fumigant in the breathing zone is determined to be 1 ppm or less, as determined by a detection device with sufficient sensitivity such as an INTERSCAN, MIRAN or SF-ExplorIR. For more detailed information on the source and use of air monitoring devices or respirators, consult the Manual For Structural Fumigation of this product.

CYLINDER AND PRODUCT DISPOSAL: Promptly return all empty cylinders to your distributor of this product. Follow proper cylinder handling directions above. Pesticide wastes are toxic. Improper disposal of excess pesticide is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, consult your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

WARRANTY DISCLAIMER

Drexel Chemical Company warrants that this product conforms to the chemical description on the label and based upon tests believed reasonably fit for the purposes stated on the label when used in strict accordance with the directions, subject to the inherent risks set forth below. To the extent consistent with applicable law, Drexel Chemical Company makes no other express or implied warranty of merchantability or fitness for a particular purpose or any other express or implied warranty.

Use Risk

It is impossible to eliminate all risks associated with use of this product. Plant injury, lack of performance, or other unintended consequences may result because of such factors as use of the product contrary to label instructions (including conditions noted on the label, such as unfavorable weather, soil conditions, etc.), abnormal conditions (such as excessive rainfall, drought, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Drexel Chemical Company or the Seller. To the extent consistent with applicable law, all such risks shall be assumed by Buyer.

Limitation of Remedies

To the extent consistent with applicable law, the exclusive remedy for losses or damages resulting from this product (including claims based on contract, negligence, strict liability, or other legal theories), shall be limited to one of the following at Drexel Chemical Company's discretion:

1. Refund of purchase price paid by Buyer or use for product bought,
or
2. Replacement of amount of product used.

To the extent consistent with applicable law, in no case shall Drexel Chemical Company or the Seller be liable for consequential, special or indirect damages or losses from the use, handling, or storage of this product.

The terms of the "Warranty Disclaimer" above and this "Limitation of Remedies" cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Drexel Chemical Company or the Seller is authorized to vary or exceed the terms of the "Warranty Disclaimer" or this "Limitation of Remedies" in any manner.

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MATERIAL SAFETY DATA SHEET

Drexel Chemical Co.
1700 Channel Avenue
Memphis, TN 38113
(901) 774-4370

Emergency Telephone No.

1-800-424-9300 (ChemTrec)

SECTION I – GENERAL INFORMATION

TRADE NAME: MASTER FUME™
CHEMICAL NAME: Sulfuryl Fluoride
CHEMICAL FAMILY: Inorganic gas
EPA REG. NO.: 19713-596
SIGNAL WORD: DANGER

SECTION II – INGREDIENTS (Class = H (Hazardous), NH (Non-Hazardous))

NAME	CAS NO.	% (by wt.)	TLV	CLASS
Sulfuryl Fluoride	002699-79-8	99.8%	5ppm	H
Inerts	N/A	0.2%	N/A	N/A

SECTION III – PHYSICAL DATA

Boiling Point: -67°F (-55°C) **Specific Gravity:** 1.35 @ 20°C
Vapor Pressure: 15.2 atmospheres @ 20°C **% Volatiles:** N/A
Vapor Density: 4.3 g/L @ 20°C **Solubility in Water:** Practically insoluble
pH: N/A **Appearance/Odor:** Colorless/odorless compressed gas

SECTION IV – FIRE & EXPLOSION DATA

Flash Point: N/A
Extinguishing Media: Water
Fire Fighting Procedures: Cylinders exposed to fire may vent and release toxic gas through melted fusible plugs on cylinders. Although sulfuryl fluoride is not combustible, in temperatures exceeding 400°C (752°F), it will degrade to form hydrogen fluoride and sulfur dioxide.

SECTION V – REACTIVITY DATA

Stability: (Conditions to avoid)
Cylinders may leak or rupture in a fire.
Incompatibility: Specific materials to avoid (Strong base)
Hazardous Decomposition Products: Sulfur dioxide and Hydrogen fluoride under fire conditions with hydrocarbons.
Hazardous Polymerization: Not known to occur.

SECTION VI – HEALTH HAZARD DATA

Carcinogenicity: N/A
Toxicity Data: Oral LD50 (RAT): 100 mg/kg, inhalation LC50 (4hr-RAT): 991-1122 ppm
TLV: 5 ppm
N.F.P.A.: Health: 3, Fire: 0, Reactivity: 1
(Rating: 4-Extreme, 3-High, 2-Moderate, 1-Slight, 0-Insignificant)
Effects of Overexposure: Respiratory irritation, central nervous system depression, nausea, abdominal pain. Pulmonary edema, lung and kidney damage, respiratory failure. There is no known antidote.

SECTION VII – EMERGENCY PROCEDURES

If Inhaled: Get exposed person to fresh air. Keep warm and at rest. Make sure person can breathe freely. If breathing has stopped give artificial respiration. Do not put anything in the mouth of an unconscious person. Call a poison control center or doctor for further treatment advice.

If Liquid is on Skin or Clothing: Immediately apply water to contaminated area of clothing before removing. Once area has thawed, remove contaminated clothing, shoes, and other items covering skin. Wash contaminated skin area thoroughly or shower. Call a poison control center or doctor for treatment advice.

If Liquid is in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

In all cases of overexposure, such as nausea, difficulty in breathing, abdominal pain, slowing of movements and speech, numbness in extremities, get medical attention immediately. Take person to a doctor or emergency treatment facility. Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this pesticide product (including health concerns, medical emergencies or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378.

NOTE TO PHYSICIAN: This product is a gas which has no warning properties such as odor or eye irritation. (However, chloropicrin is used as a warning agent and is a known lachrymator). Early symptoms of exposure to this product are respiratory irritation and central nervous system depression. Excitation may follow. Slowed movement, reduced awareness, and slow or garbled speech may be noted. Prolonged exposure can produce lung irritation, pulmonary edema, nausea, and abdominal pain. Repeated exposure to high concentrations of this product can result in significant lung and kidney damage. Single exposures at high concentrations have resulted in death. Treat symptomatically. The liquid form of this product in the eye may cause damage due to refrigeration or freezing.

SECTION VIII- SPILL OR LEAK PROCEDURES

Steps to be taken in case of material leak or spill:
Evacuate area if cylinder begins to leak. Assure proper SCBA is worn. Safely move damaged cylinder outdoors or an isolated location. Work up-wind. Observe strict safety precautions.

Waste Disposal Method
Dispose of in accordance with Local, State, and Federal Regulations.

SECTION IX – SPECIAL PROTECTION INFORMATION

DANGER: Fatal if inhaled. Causes irreversible eye damage. Liquid causes freeze burns of exposed skin. May be fatal if swallowed. Do not breathe vapor. Do not get in eyes, on skin, or on clothing. This product is odorless and colorless. Exposure to toxic levels may occur without warning or detection by the user.

PERSONAL PROTECTION EQUIPMENT (PPE): Wear splash resistant goggles or full face shield when handling the product during introduction of fumigant or when working around any lines containing fumigant under pressure. Do not wear gloves or rubber boots. Do not reuse clothing or shoes that have become contaminated with product until cleaned and thoroughly aerated.

RESPIRATORY PROTECTION: If the concentration of this product in the fumigated area does not exceed 1 ppm, no respiratory protection is required. When this concentration is exceeded or when the concentration of this product is unknown, all persons in these areas must wear a NIOSH or MSHA approved positive pressure self-contained breathing apparatus (SCBA, not SCUBA), approval number prefix TC-19C, or combination air-supplied/SCBA respirator such as manufactured by Draeger, Ranger, Survivair, Scott, or MSA. This SCBA must be on site and operational before fumigation. Before using any make or brand of SCBA, learn how to use it correctly. Determine that it is in good working order, has an adequate air supply for the job at hand, fits properly, and provides an adequate seal around the face.

SECTION X – SPECIAL PRECAUTIONSPrecautions To Be Taken In Handling & Storage

KEEP OUT OF REACH OF CHILDREN. FOLLOW LABEL DIRECTIONS CAREFULLY. DO NOT BREATHE GAS.

Store away from foodstuffs.

D.O.T. Description: UN-2191, Sulfuryl Fluoride, 2.3, Poison
Inhalation Hazard/Zone D.

NOTE: DO NOT SHIP BY AIR.

Freight Description: Specialty gas fumigant

Reportable Quantity: N/A

E.R.G. Guide Sheet: 123

For all other modes of transportation: UN-2191, SULPHURYL FLUORIDE, 2.3, POISON, INHALATION HAZARD, ZONE D.

The information presented herein for consideration, while not guaranteed, is true and accurate to the best of our knowledge. No warranty, or guaranty is expressed or implied regarding the accuracy or reliability of such information and we shall not be liable for any loss or consequential damages arising out of the use thereof.

Date Reviewed: 3-18-2013