# **Specimen Label**

# RESTRICTED USE PESTICIDE DUE TO INHALATION TOXICITY

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.





# SPECIALTY GAS FUMIGANT

®Trademark of Douglas Products and Packaging Company ("Douglas")

For control of: Existing infestations of listed insects and related pests such as drywood termites, Formosan termites, powder post beetles, death watch beetles, old house borers, bedbugs, cockroaches, clothes moths, rodents (rats, mice), and the larvae and adults of carpet beetles (except egg stage), oriental, American, and brown-banded cockroaches.

For use in: Dwellings (including mobile homes), buildings, construction materials, furnishings (household effects), shipping containers and vehicles including automobiles, buses, surface ships, passenger railcars, and recreational vehicles (but not including aircraft).

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

Application personnel must participate in Douglas Products' Sulfuryl Fluoride Training and Stewardship Plan.

Active Ingredient	
sulfuryl fluoride	99.8%
Other Ingredients	
Total	100.0%
EPA Reg. No. 1015-78	

# Keep Out of Reach of Children



# PELIGRO

Precaucion al usuario: Si usted no lee inglés, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

# **Precautionary Statements**

#### **Hazards to Humans and Domestic Animals**

Extremely Hazardous Liquid And Vapor Under Pressure • Fatal If Inhaled • May Be Fatal If Swallowed • Liquid May Cause Freeze Burns of Exposed Skin

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

#### **First Aid**

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.

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 on 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 further treatment advice.

If liquid is in eyes: Hold eye open and rinse slowly and gently with water for 15-20 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.

Note to Physician: Vikane 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 Vikane 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 can result in significant lung and kidney damage. Single exposures at high concentrations have resulted in death. Treat symptomatically. Liquid Vikane in the eye may cause damage due to refrigeration or freezing.

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Refer to elsewhere on this label for additional precautionary information and Directions for Use.

Notice: Read the entire label. Use only according to label directions. Before using this product, read Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies elsewhere on this label. If terms are unacceptable, return at once unopened.

In case of emergency endangering health or the environment involving this product, call 1-844-845-3129 or 1-352-323-3500.

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

# **Directions for Use**

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

Read all Directions for Use carefully before applying.

# **Storage and Handling**

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

Cylinders must not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging, or sliding beyond that which would normally occur when moving cylinders. 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

# Storage and Handling (Cont.)

unprotected persons until concentration of fumigant in the breathing zone (areas within the structure where individuals typically stand, sit or lie down) is determined to be 1 part per million (ppm) or less, as determined by a detection device with sufficient sensitivity such as an INTERSCAN, MIRAN [SapphIRe] or Spectros ExplorIR gas analyzers. For more detailed information on the source and use of air monitoring devices or respirators, consult the Vikane Gas Fumigant Structural Fumigation Manual.

**Cylinder and Product Disposal**: Promptly return all empty cylinders to your distributor of Vikane. Follow proper cylinder handling directions above.

Pesticide wastes are acutely hazardous. 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.

#### Information

The Structural Fumigation Manual is part of the labeling for Vikane. Before using, read and follow all label precautions and directions. Prior to the parties entering into a fumigation agreement, the Fact Sheet for Vikane must be provided to an adult occupant of the structure to be fumigated.

Vikane is a highly hazardous material and must be used only by individuals knowledgeable of the hazards of this chemical and trained in the use of required respiratory equipment, fumigant detection devices, emergency procedures, and in the proper use of this fumigant.

When used for fumigation of enclosed spaces, such as houses and other structures, warehouses, vaults, chambers, trucks, vans, boxcars, ships, and other transport vehicles, 2 persons trained in the use of this product, at least one being an applicator who is licensed/certified by the state, must be present during introduction of fumigant, reentry prior to aeration, and during the initiation of the initial aeration procedure when exposure exceeds 1 ppm. Two persons need not be present if monitoring is conducted remotely (outside the area being fumigated) and no one enters the fumigated structure.

If fumigating for insect pests, do not apply when temperature at site of pest activity is below 40°F. This temperature may be measured at the slab foundation, sub-floor soil, or wherever the coolest part of the structure may be. This restriction does not apply when fumigating for rodents.

When fumigating a single unit/room within or connected to a larger structure (such as town houses, apartments, condominiums), all units of the entire structure must be vacated during the fumigation and aeration periods.

Remove food, feed, drugs, and medicinals from the structure before the fumigation if they cannot be adequately sealed to prevent exposure to Vikane. Chloropicrin must be used as described on this label to warn of an ongoing fumigation.

#### Preparation for Fumigation

### **Structural Fumigation**

Remove from the structure to be fumigated all persons, domestic animals, pets, and desirable growing plants. See the Structural Fumigation Manual for instructions regarding the handling of fish tanks. For mattresses (excluding waterbeds) and pillows completely enveloped in waterproof coverings, do one of the following: 1) open the seal of the water proof covering or 2) remove the mattress or pillow from the space to be fumigated if the waterproof covering cannot be opened. Mattresses and pillows with waterproof coverings containing built-in vents designed to permit air passage are considered to have an open seal to the waterproof covering and can remain as-is in the fumigated space. Food, feed, drugs (including tobacco products), and medicinals (including those items in refrigerators and freezers) can remain in the structure if they are in plastic, glass, or metal bottles, cans, or jars with the original manufacturer's air-tight seal intact. Food, feed, drugs (including 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 Nylofume\* bags, which are available from distributors of Vikane.

Note: 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.

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 Vikane in them is 1 ppm or less.

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 Vikane. Ensure that all exterior entranceways and 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 Vikane is introduced. During Step (3) of Aeration Procedure 1 or 2, check all units within the fumigated structure for concentrations of Vikane with an approved clearance device. If the concentration of Vikane is greater than 1 ppm in the breathing zone (i.e., areas within the structure where individuals typically stand, sit or lie down) in a unit, ventilate the unit with operable doors and windows open and continue to measure the concentration of Vikane until it is 1 ppm or less. Structure may be reoccupied when concentrations in the breathing zones in all units is 1 ppm or less.

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 Vikane is introduced. Concentration levels of Vikane must be measured in the breathing zones (areas within the structure where individuals typically stand, sit or lie down) (see Aeration and Reentry) in any connected space or structure to confirm concentrations are 1 ppm or less before structure can be reoccupied.

#### **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." To minimize escape of gas through the soil and to avoid injury to nearby plants, wet soil outward from foundation to the cover if not sufficiently moist to act as a barrier for the gas.

#### **Taped Fumigation**

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

# **Chamber Fumigation**

For chamber fumigation use a tightly-sealed chamber with adequate circulation.

# Construction Materials, Furnishings (Household Effects), Vehicles, and Shipping Containers

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

#### **Fumigation of Surface Ships in Port**

Surface ships in size up to and including large ocean-going ships may be furnigated with Vikane to control the various pests listed. The professional furnigator and the ship's captain (or owner) shall follow all applicable regulations including those listed in the Coast Guard, DOT, Title 46, Shipping section, Parts 147A.1-147A.43. Except for those persons involved in furnigation, no people, plants, or pets may be on board during furnigation.

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

#### Warning Agent

Chloropicrin is a warning agent introduced into the structure during fumigation. 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(s). 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 fl oz per container. Use 1 fl oz/10,000 to 15,000 cubic feet (30 ml/283 to 425 cubic meters) of space to be fumigated or follow dosage rate calculated by the electronic Fumiguide™ 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 after tarp removal will aid in the dissipation of the warning agent from the structure.

Chloropicrin need not be used when fumigating passenger 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.

Chloropicrin is a warning agent which causes smarting of the eyes, tears, and discomfort, and has a very disagreeable pungent odor at very low concentrations. Chloropicrin must be used by persons certified to apply Vikane or under their supervision. Applicators must observe the chloropicrin precautionary statements and personal protective equipment appearing on this label. See the Warning Agent section of the Structural Fumigation Manual.

#### **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 liquid Vikane until thoroughly aerated and cleaned.

# **Respiratory Protection**

If the concentration of Vikane in the breathing zone (areas within the structure where individuals typically stand, sit or lie down) of the fumigated area (as measured by a detector device with sufficient sensitivity such as an INTERSCAN, MIRAN [SapphIRe] or Spectros ExplorIR gas analyzers) does not exceed 1 ppm (4 mg/cubic meter), no respiratory protection is required. When this concentration is exceeded, 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 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 Vikane Gas Fumigant Structural Fumigation Manual.

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 doors 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 securing against entry.

#### **Securing Passenger Railcars**

Follow either Procedure #1 or Procedure #2 for securing railcars.

**Procedure #1:** A thorough walk through inspection must be performed of each railcar with doors being immediately locked upon leaving each car. Post a guard during fumigation introduction, exposure period, and aeration. Because a guard is posted, application of a warning agent is not required for passenger railcars.

**Procedure #2:** A thorough walk through inspection must be performed of each railcar with doors being immediately locked upon leaving each car. If no guard is posted, then apply a warning agent following instructions per label directions. To secure the passenger railcar against unauthorized entry during the fumigation exposure period, use a locking device or barricade on all exterior doors or doorways. A locking device or barricade must be demonstratively effective in preventing an exterior door or doorway from being opened using normal opening or entering processes by anyone other than the state licensed 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 local restrictions on securing against entry.

#### **Dosage and Exposure Time**

For fumigation to control drywood termites and non-egg stages of other insect and related structural and household pests, the Fumiguide calculator(s) 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 indicated multiple factor of the drywood termite dosage (as determined by Fumiguide calculator(s)) for pests listed in the following table:

Pest	Dosage Factor (as a multiple of drywood termite dosage)
rodents <sup>1</sup>	1/2X
carpet beetles <sup>2</sup> , German cockroaches, and other cockroach species <sup>2</sup>	1X
Bedbugs	1.9X
furniture carpet beetles <sup>2</sup>	3X
old house borers and Formosan termites	4X
clothes moths	6X
powder post beetles and death watch beetles	10X

These dosages apply to dwellings, buildings, construction materials, furnishings, and vehicles.

Do not use less than the specified dosage factors when treating for rodents, cockroaches, bed bugs, and termites.

<sup>1</sup>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.

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

For fumigation to control rodents, use sufficient gas to accumulate at least 36 ounce-hours following equilibrium, regardless of ambient air temperature. Refer to the Vikane Gas Fumigant Structural Fumigation Manual.

The Fumiguide B Calculator is to be used for unmonitored structures to coordinate fumigant rates with temperatures, a 20- to 24-hour exposure period, and an estimated HLT.

The Fumiguide Y Calculator is used in conjunction with Fumiguide B when fumigant concentrations are monitored and/or there are measured variations in exposure time.

The Fumiguide Calculator is a hand-held microprocessor which performs the functions of both the Fumiguide B and Y calculators and includes relative humidity as a calculating factor.

Software versions of the Fumiguide Calculator may be available. Contact Douglas Products and Packaging Company or your distributor of Vikane for information on where to obtain the Fumiguides and referenced literature.

#### **Introducing the Fumigant**

Release the fumigant from outside the structure, tarp, or vehicle. 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 pounds per square inch (psi). Direct the fumigant into the blast of air from a fan(s) having a capacity of at least 1,000 cubic feet per minute (cfm) for each pound of Vikane released per minute. Damage to household materials can occur if insufficient fan

capacity is used for the rate of Vikane released. It is recommended that protective sheeting, such as polyethylene plastic under the shooting stand, shooting hose, and shooting fan be used to further protect floors during application. To prevent damage, do not apply fumigant directly to any surface.

#### **Posting of Fumigated Areas**

The applicator must post all entrances to the fumigated areas with signs bearing, in English and Spanish:

- The signal word DANGER/PELIGRO and the SKULL and CROSSBONES symbol.
- 2. The statement, "Área 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 Vikane within the structure where individuals typically stand, sit or lie down, is 1 ppm or less.

#### **Aeration and Reentry**

#### **Structures**

No one is allowed in treated areas if the level of Vikane is above 1 ppm unless provided with 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. Note: During the initial one hour aeration procedure, approved respiratory protection must be worn until the concentration of Vikane is confirmed not to exceed 1 ppm with an approved detection device. Since the INTERSCAN, MIRAN [SapphIRe] and Spectros ExplorIR gas analyzers give immediate readings, respiratory protection is not required when clearing with these instruments after having completed the initial one hour aeration procedure. If a reading indicates levels in excess of 1 ppm, leave the affected area immediately.

Only an approved detection device of sufficient sensitivity, such as the INTERSCAN, MIRAN [SapphIRe] or Spectros ExplorIR gas analyzer, can be used to confirm a concentration of Vikane of 1 ppm or less. The INTERSCAN must be calibrated according to manufacturer recommendations within one month prior to use as a clearance device. All other approved detection devices must be calibrated according to manufacturer recommendations. The concentration of Vikane must be monitored in breathing zones (areas within the structure where individuals typically stand, sit or lie down). Structure must remain posted for fumigation until cleared for reentry.

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

Select the appropriate procedure based on the fumigation rate:

All structures fumigated at 16 oz/MCF or less may be aerated using procedures 1 or 2.

All structures fumigated at concentrations greater than 16 oz/MCF must be aerated using procedure 2.

#### **Aeration Procedure 1**

#### These steps must be completed in sequence.

**Step (1):** Aerate structure with all operable windows and doors open, aided by the use of one 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 Vikane in breathing zones of each room. If the concentration of Vikane is greater than 1 ppm, ventilate structure with operable doors and windows open and confirm concentrations are 1 ppm or less before the structure is reoccupied.

#### **Aeration Procedure 2**

#### These steps must be completed in sequence.

**Step (1):** Aerate structure with all operable windows and doors open, aided by the use of one 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 concentrations of Vikane in breathing zones of each room. If the concentration of Vikane is greater than 1 ppm, ventilate structure with operable doors and windows open and confirm concentrations are 1 ppm or less before the structure is reoccupied.

#### **Passenger Railcars**

Passenger railcars may be aerated using either of the following two aeration procedures (railcars must remain posted until cleared for re-occupancy):

#### **Aeration Procedure 1:**

If on-board railcar ventilation systems are not operable, aerate railcar for a minimum of 6 hours using the following procedure:

Step (1): Remove all tape, seals, and/or tarps.

Step (2): Open all exterior railcar doors.

Step (3): Open all internal doors such as cabinets, closets, appliances and sleeping berths.

Step (4): In sleeper cars, turn all mattresses askew to expose cavities beneath sleeping berths.

**Step (5):** Ventilate the railcars for a minimum of 1 hour with enough portable fans to provide a minimum 4000 cfm capacity per floor. A bilevel railcar would require 8000 cfm capacity or greater - 4000 cfm per floor. Direct fans in such a manner to create cross-ventilation of railcar.

**Step (6):** After the minimum 6-hour aeration time, railcars may be reoccupied when the concentration of Vikane is 1 ppm or less with all doors and windows closed and ventilation systems turned off as measured by a detection device with sufficient sensitivity such as an INTERSCAN, MIRAN [SapphIRe], or Spectros ExplorIR gas analyzers.

#### **Aeration Procedure 2:**

If on-board railcar ventilation systems are operable, actively ventilate the railcar for a minimum of 2 hours using the following procedures:

Step (1): Remove all tape, seals, and/or tarps.

Step (2): Open all exterior car doors.

Step (3): Open all internal doors such as cabinets, closets, appliances and sleeping berths.

**Step (4):** In sleeper cars, turn all mattresses askew to expose cavities beneath sleeping berths.

**Step (5):** Turn on all on-board Heating, Ventilation, Air-Conditioning (HVAC) systems and exhaust fans.

Step (6): In sleeper cars, turn on all operable wall or ceiling mounted fans.

Step (7): Ventilate the railcar with enough portable fans to provide a minimum 4000 cfm capacity per floor (in addition to on-board systems). A bilevel railcar would require 8000 cfm capacity or greater - 4000 cfm per floor. Direct fans in such a manner to create cross-ventilation of railcar.

**Step (8):** After the minimum 2 hours active ventilation/aeration, the railcar may be reoccupied when the concentration of Vikane is 1 ppm or less with all doors and windows closed and ventilation systems turned off as measured by a detection device with sufficient sensitivity such as an INTERSCAN, MIRAN [SapphIRe], or Spectros ExplorIR gas analyzers.

For more detailed information on the source and use of air monitoring devices or respirators, consult the Vikane Gas Fumigant Structural Fumigation Manual. 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.

#### **Terms and Conditions of Use**

If terms of the following Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies are not acceptable, return unopened package at once to the seller for a full refund of purchase price paid. Otherwise, use by the buyer or any other user constitutes acceptance of the terms under Warranty Disclaimer, Inherent Risks of Use and Limitation of Remedies.

#### Warranty Disclaimer

Douglas Products and Packaging Company warrants that this product conforms to the chemical description on the label and is 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 PERMITTED BY LAW, DOUGLAS PRODUCTS MAKES NO OTHER EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER EXPRESS OR IMPLIED WARRANTY.

# **Inherent Risks of Use**

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 low temperature, soil conditions, etc.), abnormal conditions (such as excessive wind, tornadoes, hurricanes), presence of other materials, the manner of application, or other factors, all of which are beyond the control of Douglas Products or the seller. All such risks shall be assumed by buyer.

#### **Limitation of Remedies**

To the extent permitted by 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, at Douglas Products' election, one of the following:

- 1. Refund of purchase price paid by buyer or user for product bought, or
- 2. Replacement of amount of product used.

Douglas Products shall not be liable for losses or damages resulting from handling or use of this product unless Douglas Products is promptly notified of such loss or damage in writing. In no case shall Douglas Products be liable for consequential or incidental damages or losses.

The terms of the Warranty Disclaimer, Inherent Risks of Use, and Limitation of Remedies cannot be varied by any written or verbal statements or agreements. No employee or sales agent of Doulgas Products or the seller is authorized to vary or exceed the terms of the Warranty Disclaimer or Limitation of Remedies in any manner.

®Trademark of Douglas Products and Packaging Company ("Douglas")

#### Produced for Douglas Products and Packaging Company 1550 East Old 210 Highway Liberty, MO 64068-9459

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EPA accepted 11/25/15

#### **Revisions:**

- Change company name, address, emergency number and EPA registration number.
- 2. Updated warranty.