ProFume* Gas Fumigant

ACTIVE CONSTITUENT: 998 g/kg SULFURYL FLUORIDE

For the control of insects in buildings (commercial and residential), timber, construction materials, furnishings, shipping containers and vehicles (excluding aircraft) and for the control of stored product pests in storage facilities such as silos or warehouses, in fumigation chambers, food handling and commodity processing facilities as specified in the Directions for Use table.

For use only by licensed fumigators trained under Dow AgroSciences’ PRECISION FUMIGATION* Program

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CUSTOMER SERVICE TOLL FREE 1-800 700 096  Contents: 56.7 kg

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**DIRECTIONS FOR USE (ALL STATES)**

**RESTRAINTS:**
DO NOT apply when the temperature within the commodity or at the site of pest activity to be fumigated is below 5°C.
DO NOT connect cylinders to introduction equipment until all fumigation warning signs have been posted and the space to be fumigated is cleared of people, non-target animals and secured.
DO NOT fumigate processed cereal commodities.
DO NOT use on any commodity, empty containers, railcars or other transportation vehicles that are in transit or likely to be in transit during exposure or ventilation.

**Rate of Use:** For all fumigations, the maximum use rate is 1500 g-h/m$^3$ CTP. Do not exceed a maximum concentration of 128 g/m$^3$.

<table>
<thead>
<tr>
<th>Situations</th>
<th>Pests</th>
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<tbody>
<tr>
<td>Dwellings (including mobile homes)</td>
<td>Existing infestations of insects such as borers, bedbugs, cockroaches, clothes moths, carpet beetles and drywood termites.</td>
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<tr>
<td>Buildings</td>
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<td>Construction materials, timber and logs</td>
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<td>Furnishings (household effects)</td>
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<td>Shipping containers (including those containing pallets, machinery and non-food items)</td>
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<td>Vehicles (including cars, buses, surface ships, rail cars and recreational vehicles but excluding aircraft)</td>
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<tr>
<td>Commodity storage and non-residential structures NOT containing food commodities including food handling and processing facilities, pet food facilities, mills, warehouses, silos, stationary transportation vehicles (railcars, trucks etc., excluding aircraft and passenger railcars), temporary and permanent fumigation chambers</td>
<td>All life stages of stored product pests including;</td>
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<td>Cereal grains eg. barley, corn or maize, millet, oat, popcorn, rice, sorghum, spelt, triticale, wheat, wild rice and polished rice</td>
<td>Indian meal moth (<em>Plodia interpunctella</em>),</td>
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<td>Dried fruits eg. apricots, dates, figs, prunes, raisins and sultanas</td>
<td>Mediterranean flour moth (<em>Ephestia kuehniella</em>),</td>
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<td>Nuts eg. almonds, beech nuts, brazil nuts, cashews, chestnuts, hazel nuts, hickory nuts, macadamias, peanuts, pecans, pine nuts, pistachios and walnuts</td>
<td>Confused flour beetle (<em>Tribolium confusum</em>),</td>
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<tr>
<td>Baled hay for animal feed and pet food</td>
<td>Rust red flour beetle (<em>Tribolium castaneum</em>),</td>
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<td>Seed storage facilities holding seeds of additional plant varieties stored for propagation purposes only (i.e. NOT intended for human consumption)</td>
<td>Warehouse beetle (<em>Trogoderma variabile</em>),</td>
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<td>Saw-toothed grain beetle (<em>Oryzaephilus surinamensis</em>),</td>
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<td></td>
<td>Dried fruit moth (<em>Ephestia cautella</em>),</td>
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<tr>
<td></td>
<td>Drugstore beetle (<em>Stegobium paniceum</em>),</td>
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<tr>
<td></td>
<td>Tobacco beetle (<em>Lasioderma serricorne</em>),</td>
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<td></td>
<td>Hide beetle (<em>Dermentes maculatus</em>),</td>
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<td></td>
<td>Grain weevil (<em>Sitophilus granarius</em>),</td>
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<td></td>
<td>Rice weevil (<em>Sitophilus oryzae</em>),</td>
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<tr>
<td></td>
<td>Rust red grain beetle (<em>Cryptoletes ferrugineus</em>) and</td>
</tr>
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<td></td>
<td>Lesser grain borer (<em>Rhizopertha dominica</em>).</td>
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</tbody>
</table>

**CRITICAL COMMENTS:** The ProFume Applicator’s Manual and the ProFume Fumiguide contain important information for the safe and effective use of this product. They must be used and must be in the user’s possession during fumigation. Most fumigation can be achieved at much lower rates than the maximum. The ProFume Fumiguide*, a PC-based computer program, should be used to calculate the required dosage and the amount of ProFume needed specific to the situation. You must be trained under the Dow AgroSciences’ Precision Fumigation™ program in order to access the ProFume Fumiguide*. If the ProFume Applicator’s Manual is lost or access to the Fumiguide program has expired, contact your ProFume distributor or Dow AgroSciences’ representative to obtain a replacement copy.
WITHHOLDING PERIOD: Allow a minimum of 24 hours following fumigation before consuming treated commodities.

GENERAL INFORMATION

*ProFume is a hazardous material and should be used only by licensed fumigators trained under the Dow AgroSciences’ Precision Fumigation™ training program.*

The release of high pressure fumigant can be forceful and there is potential for personal injury. Care must be exercised when fumigating, especially tarped commodities, so that the fumigant is not released too rapidly and “balloons” the tarp off the restraining sand or water snakes. A fog-out can also occur if the fumigant is released too rapidly, cooling the air temperature below the dew point. The rapid discharge of ProFume through introduction equipment will result in cooling parts of the equipment and the cylinders. Contact with the cooled equipment can cause frostbite. When used for fumigation of enclosed spaces, such as houses and other structures, warehouses, vaults, chambers, trucks, vans, rail cars, ships and other transport vehicles, 2 persons trained in the use of this product, one of whom is licensed by the competent state authority, must be present during introduction of the fumigant, re-entry prior to aeration, and during the initiation of the initial aeration procedure. **Two persons need not be present if monitoring is conducted remotely (i.e. outside the area being fumigated).**

*Use of warning agent: Chloropicrin* is a warning agent that can be introduced into a structure during fumigation only where relevant to avoid direct exposure to ProFume. Chloropicrin may be released into a building at least 5 to 10 minutes prior to introduction of ProFume in situations where there is a high risk of persons inadvertently remaining in, or entering into, a fumigated building. To introduce the warning agent, place a handful of wicking agent (e.g. cotton) in a shallow chloropicrin evaporation container (e.g. dish). Do not use containers or application equipment made of magnesium, aluminium or their alloys, as chloropicrin may be severely corrosive to such metals. To enhance the distribution of chloropicrin throughout the structure, place the container in the air stream of a fan. Pour chloropicrin over the wicking agent. Dispense no more than 30 ml for 425 m$^3$ of space to be fumigated. Establish at least one chloropicrin introduction site for every 1275 m$^3$ of space to be fumigated.

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

*Chloropicrin is a warning agent that causes smarting of the eyes, tears and discomfort, and has a very disagreeable pungent odour at very low concentrations. Chloropicrin must be used by a person certified to apply ProFume, or under their supervision. Fumigators must observe the precautionary statements and safety recommendations appearing on the label of this product.*
PRECAUTIONS

Do not apply fumigant directly onto any surface. 

Do not use this product without the Fumiguide® Program for ProFume. The ProFume Fumiguide is a computer program available to calculate safe and effective levels of ProFume for fumigating structures and commodities. Carefully read the label and the ProFume® Applicator’s Manual before using this product. Extinguish all flames including pilot lights of furnaces, hot water heaters, dryers, gas refrigerators, ranges, ovens, broilers, and open flames. Turn off or unplug all electrical heating elements such as those in heaters, dryers, etc. Shut off automatic switch controls for appliances and lighting systems that will be included in the space to be fumigated. Contact your local gas company to determine what procedures should be followed in your area for shutting off natural gas or propane service. Gas service should be shut off at the main service valve. ProFume Gas Fumigant can also react with strong bases such as some photo developing solutions.

Never allow untrained individuals to use ProFume.

Walk through of areas to be fumigated & securing structure entrances

A thorough walk-through inspection of areas to be treated must be performed immediately prior to the introduction of the fumigant with all entrances being locked upon leaving. To secure the structure against unauthorised entry during fumigation 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 certified applicator in charge of the fumigation or persons under their direct supervision.

Notify appropriate owners, employees, and/or operators at the facility where the fumigation will occur. All entrances and all sides of the fumigated structure or fumigated space must have warning signs (see below):

Posting (Signage) of Fumigated Areas

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

1. The SKULL and CROSSBONES symbol.
2. The statement, “Area under fumigation, DO NOT ENTER”.
3. The date of fumigation.
4. Name of Fumigant used.
5. Name, address and telephone number of the applicator.

Only a licensed fumigator may authorize removal of placards and the structure must remain posted for fumigation until clear for re-entry when the concentration of ProFume in the treated site is 3 ppm or less. The concentrations of ProFume Gas Fumigant must also be monitored in breathing zones outside the structure as appropriate.

No one should be in treated areas if the level of ProFume Gas Fumigant is above 3 ppm unless provided with an approved, positive pressure self contained breathing apparatus (SCBA) or combination air supplied/SCBA respirator. Since the approved clearance devices give immediate readings, respiratory protection is not required when clearing with these instruments after having completed the initial aeration procedure. However, if a reading indicates levels in excess of 3 ppm, leave the affected area immediately.

Re-entry

Do not allow entry into the treated structures until the concentration of ProFume Gas Fumigant is confirmed to be less than 3 ppm, measured with an approved detection device.
If required to enter into the fumigated area during the aeration procedure, approved respiratory protection must be worn until concentration of ProFume is confirmed not to exceed 3 ppm with an approved detection device. No one shall be in fumigated areas if the level of ProFume is above 3 ppm unless wearing an approved positive pressure self-contained breathing apparatus (SCBA) or combination air supplied/SCBA respirator. However once the initial aeration procedure has been undertaken, use of an approved full facepiece respirator with combined dust and gas cartridge may be used if in the treatment area for short periods. Once the concentration is confirmed to be less than 3 ppm, the structure is cleared for immediate re-entry.

**Note 1:** Only an approved detection device of sufficient sensitivity (LOD <1 ppm) can be used to confirm a concentration of ProFume of 3 ppm or less. Such devices must be calibrated according to manufacturer recommendations. Refer to the ProFume Applicator’s Manual for further guidance on detection devices.

**Note 2:** 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.

**Leak Procedures**
Evacuate immediate area of leak. Use an approved positive pressure self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator 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 is determined to be 3 ppm or less, as determined by an approved detection device with sufficient sensitivity.

**Additional Precautions and Safety Information**
Do not wear gloves or rubber boots. Do not reuse clothing or shoes that have become contaminated with liquid ProFume until thoroughly aerated. Wear loose fitting or well-ventilated long-sleeve shirt, long pants, shoes and socks.

In all cases of overexposure, when symptoms such as nausea, difficulty in breathing, abdominal pain, slowing of movements and speech, or numbness in extremities are exhibited, get medical attention immediately. Take person to a doctor or emergency treatment facility.

**Transportation of Cylinders**
Do not transport cylinders in closed vehicles where the same common airspace is occupied by personnel. On public roads transport only when secured in an upright position. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Do not remove valve protection bonnet and safety cap until immediately before use. When cylinder is empty, close valve, screw safety cap onto valve outlet, and replace protection bonnet before returning to supplier. ProFume cylinders must never be transported by aircraft under any circumstances.

**PROTECTION OF WILDLIFE, FISH, CRUSTACEANS AND ENVIRONMENT**
ProFume Gas Fumigant is a highly toxic gas. Do not expose non-target organisms. This pesticide is toxic to fish and wildlife.

**STORAGE AND DISPOSAL**
**Storage:**
Store in a dry, cool, well-ventilated, secured and locked area. Storing indoors in occupied areas in buildings is not recommended.
ProFume cylinders are under pressure and must not be stored near heat or open flame. Exposures to temperatures above 70°C will cause a fusible plug to melt and the contents will be released. Store cylinders upright; secured to a rack or wall to prevent tipping. Cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging, or sliding. Do not store near food, feedstuffs, fertilisers or seed.

**Disposal:**
Empty cylinders **MUST** be returned to your supplier. **DO NOT** use cylinders for any other purpose. Follow proper cylinder handling directions above. Cylinders remain the property of Dow AgroSciences.

**SAFETY DIRECTIONS**
Direct contact with liquid may cause irreversible eye damage and/or freeze burns on exposed skin. Wear splash resistant goggles or full face shield when handling the liquid product during introduction of fumigant or when working around any lines containing fumigant under pressure. Harmful if inhaled. Do not inhale vapour. If required to enter into a fumigated area, an approved positive pressure self-contained breathing apparatus (SCBA) or combination air-supplied/SCBA respirator must be worn until concentration of ProFume is confirmed not to exceed 3 ppm with an approved detection device.

**FIRST AID**
If poisoning occurs, contact a doctor or Poisons Information Centre. Phone 131126 (Australia).

**MATERIAL SAFETY DATA SHEET**
Additional information is listed on the Material Safety Data Sheet for **PROFUME GAS FUMIGANT** which is available from Dow AgroSciences on request. Call Customer Service Toll Free on 1 800 700 096 or visit [www.dowagrosciences.com.au](http://www.dowagrosciences.com.au)

Made in the USA

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**EMERGENCY RESPONSE**
(All Hours)
RING FROM ANYWHERE IN AUSTRALIA
1-800 033 882
(LOCAL CALL FEE ONLY)

**IN A TRANSPORT EMERGENCY ONLY**
DIAL 000
FOR POLICE OR FIRE BRIGADE

APVMA Approval No.: 59952/56.7kg/1007

**UN 2191**
**SULFURYL FLUORIDE**
**INHALATION HAZARD**

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