

**PROFUME™ GAS FUMIGANT HAZARDS AND RISKS**

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Although Profume™ is a very effective and relatively easy product to use, it is none the less a hazardous substance that could have serious consequences if not used in the correct and safe manner.

Having no warning properties such as odour or eye irritation to assist in detection of exposure to escaping or leaking gas, it is extremely important that appropriate preventive measures are utilised and adhered to when handling and administering Profume™ Gas Fumigant.

The following table highlights the hazards and risks presented when conducting fumigation activities with Profume™, and the necessary measures required to reduce the level of risk those hazards present.

Who is at risk?				
<ul style="list-style-type: none"> <li>Operators (Fumigators)</li> <li>Family Members</li> </ul>		<ul style="list-style-type: none"> <li>Co-workers</li> <li>Bystanders</li> <li>Animals and Pets</li> </ul>		
Hazard	Risk	Risk Factor	Control	Revised Risk Factor
Training / skills / knowledge	Fumigation and gas administration being undertaken with a lack of skills, training or knowledge	High	<ul style="list-style-type: none"> <li>All fumigation and gas handling to be completed by persons who:                             <ul style="list-style-type: none"> <li>Are licenced fumigators, and</li> <li>Have completed the Profume training course</li> </ul> </li> </ul>	Low
Inhalation	Exposure from leaking or damaged cylinders	Moderate	<ul style="list-style-type: none"> <li>Inspect all cylinders upon receipt and prior to use</li> <li>Use Monitoring/ Leak Detection Equipment</li> <li>Use appropriate PPE</li> <li>Evacuate others to an area upwind, or protected from the immediate vicinity of leaking cylinders</li> <li>Be familiar with emergency procedures</li> </ul>	Low
	Gas escape from cylinder or line during application	Moderate	<ul style="list-style-type: none"> <li>Inspect cylinder and lines prior to commencing</li> <li>Use Monitoring/ Leak Detection Equipment</li> <li>Wear Self Contained Breathing Apparatus (SCBA)when administering gas</li> </ul>	Low
	Door or opening of structure being opened prior to completion of / immediately following gas administration	High	<ul style="list-style-type: none"> <li>Notify all persons in vicinity / with access, prior to commencing fumigation</li> <li>Use physical lock out mechanism where possible</li> <li>Install fumigation and hazard signage on and around structure prior to commencing</li> </ul>	Low
	Exposure to gas escape from structure that is not sealed	High	<ul style="list-style-type: none"> <li>Inspect structure prior to planning fumigation</li> <li>Have structure pressure tested for ability to contain gas content</li> <li>Seal structure against leaks</li> <li>Ensure other persons and animals are a safe distance from the fumigation structure (minimum 3m outdoors and 6m indoors)</li> <li>Wear Full Face Respirator Mask when conducting air monitoring around the structure</li> </ul>	Low

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	Persons entering structure under fumigation following gas administration	High	<ul style="list-style-type: none"> <li>• Ensure openings and entrances are locked (where possible) to prevent accidental entry</li> <li>• Barricade area surrounding fumigation structure and install fumigation and hazard signage prior to commencing</li> </ul>	Low
	Entering fumigation structure, or accessing contents before aeration complete	High	<ul style="list-style-type: none"> <li>• Ensure barricading and signage remains in place until aeration is complete &amp; acknowledged via a clearance certificate.</li> <li>• Keep animals and pets away from structure until aeration is complete and gas levels are safe Ensure relevant monitoring is conducted and Profume concentration is at or below 3 ppm before unprotected entry is granted</li> </ul>	Low
Contact	Freezing of skin (Frostbite) if contact occurs immediately on release from cylinder	Moderate	<ul style="list-style-type: none"> <li>• Do not turn cylinder valve on until all lines are attached</li> <li>• Do not stand directly in front of cylinder when opening valve</li> <li>• Wash skin immediately if contact occurs</li> </ul>	Low
	Severe damage to eyes if contact occurs immediately on release from cylinder	High	<ul style="list-style-type: none"> <li>• Wear a Full Face Mask / Shield when administering gas</li> </ul>	Low
	Gas becoming trapped in gloves and rubber boots	Moderate	<ul style="list-style-type: none"> <li>• Wear loose fitting or well-ventilated long-sleeve shirt, long pants, shoes and socks (no gloves or rubber boots)</li> </ul>	Low
	Contact with contaminated clothing	Moderate	<ul style="list-style-type: none"> <li>• Apply water to contaminated clothing covering skin immediately - Remove clothing once area has thawed</li> <li>• Do not re-use contaminated clothing or shoes until they have been adequately ventilated and washed</li> </ul>	Low
Fire	Discharge of gas from melted cylinder plugs	Moderate	<ul style="list-style-type: none"> <li>• Have emergency fire facilities readily available</li> <li>• Be familiar with Safety Data Sheet fire instructions</li> </ul>	Low
	Production of Hydrogen Fluoride and Sulfur Dioxide if excessively heated (400°C +)	Moderate	<ul style="list-style-type: none"> <li>• Have SCBA readily available</li> <li>• Evacuate area and move upwind if fire escalates</li> <li>• Cool cylinders with water spray if away from immediate fire zone and safe to do so</li> <li>• Notify emergency services of hazardous substance risk</li> </ul>	Low

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**All site and job specific hazards and risks should be assessed and measures put into place to minimise identified risks before commencing fumigation work with Profume™ Gas Fumigant.**