Safety Data Sheet

Section 1 – IDENTIFICATION OF THE MATERIAL AND SUPPLIER	
Product Name:	BV2 Total Release Fumigator Aerosol
Uses:	Residual insecticide total release aerosol for crawling insects.
Company:	Northern Distributors
Address:	32 Detroit Drive
	Rolleston, Christchurch, N.Z.
Telephone:	+64 3 307 9793
Email:	sales@northerndistributors.co.nz
Emergency Phone Number:	0800 764 766
National Poison Centre:	0800 764 766 (0800 POISON)

Section 2 – HAZARDS IDENTIFICATION

Product is classified as hazardous according to the Hazardous Substance (Minimum Degrees of Hazard) Regulations 2001.

Hazard Classifications:

2.1.2A	Flammable aerosol
6.1E (All) (O)	Acutely toxic
6.3A	Irritating to the skin
6.4A	Irritating to the eye
6.5A	Respiratory sensitisers
6.5B	Contact sensitisers
6.7B	Suspected human carcinogens
6.9B (All)	Harmful to human target organs or systems
9.1A (All, C, F)	Very ecotoxic in the aquatic environment



Signal Words: Danger

Hazard Statement Codes

H223	Flammable aerosol.
H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H333	May be harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H371	May cause damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Section 3 – COMPOSITION INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS No.	Proportion, % m/m
Naphtha (Petroleum), Hydrotreated Heavy	64742-48-9	10 - 30
Methylene Chloride	75-09-2	30 - 60
2-Propanol	67-63-0	10 - 30
Naphtha (Petroleum), Hydrotreated Heavy	64742-48-9	< 10
Piperonyl Butoxide	51-03-6	< 1
Permethrin	52645-53-1	< 1
Hydrocarbon propellant (Propane, Butane)	106-97-8, 74-98-6	10 - 30
Other ingredients determined to not be hazardous	-	to 100%

Section 4 – FIRST AID MEASURES

If medical advice is needed, have product container or label at hand.

If exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.

Eye contact:	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Inhalation:	IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/ physician.
Ingestion:	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician. Do NOT induce vomiting. Where there is risk of vomiting, lean person forward or place on left side to avoid aspiration of product into lungs. Obtain immediate medical attention.
Skin contact:	Direct contact may cause irritation in sensitive individuals. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention.
Notes to physician:	Treat symptomatically and supportively. No specific antidote. Potential for chemical pneumonitis. Consider: gastric lavage with protected airway, administration of activated charcoal.

Section 5 – FIRE-FIGHTING MEASURES

Specific hazards:	Containers can build up pressure if exposed to heat and/or fire and may explode. Vapours may form an explosive mixture with air. Vapours can travel to a source of ignition and flash back. Will float and can be re-ignited on surface water. Will burn if involved in a fire.
Further advice:	On burning may emit toxic fumes including those of carbon monoxide and carbon dioxide. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion. Use water spray to keep fire-exposed containers cool.
Extinguishing media:	For small fires, use dry chemical, carbon dioxide, water spray or foam. For large fires, use water spray, fog, or foam. Use water spray to cool fire-exposed containers. Do not discharge extinguishing waters into the aquatic environment. Do NOT use straight streams of water.
Hazchem Code:	2YE

Section 6 – ACCIDENTAL RELEASE MEASURES

Minor spills:Clean up immediately. Remove all sources of ignition. If safe, damaged cans should be placed in a
container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans
should be gathered and stowed safely. Provide ventilation. Collect spillage. Wash with water.Major spills:Evacuate the spill area. Call the Fire Brigade. Remove all sources of ignition. If safe to do so,
prevent spillage from entering drains or water courses. If material enters drains, advise emergency
services. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled
containers for disposal. Do not use aluminium or galvanised containers. Wash area down with
excess water.

Section 7 – HANDLING AND STORAGE

Handling Precautions:	Read product label before use. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
	This product is highly flammable. Do not use near open flame, or sources of ignition. No smoking. Pressurised container: Do not pierce or burn, even after use. Use outdoors or in well-ventilated area.
	Wear protective gloves and eye protection. Wash hands with soap and water after handling. Contaminated work clothing should not be allowed out of the workplace. Wash protective clothing before reuse and separate to household laundry.
Storage:	Keep out of reach of children. Protect from sunlight. Do not expose to temperatures exceeding 50°C. Store in a well ventilated, cool, dry place. Keep away from heat, sparks, and flame. Store locked up.

Section 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

No value assigned for this specific material. However, exposure standards for constituents;

	Material	TWA, mg/m ³	STEL, mg/m ³
	Methylene Chloride (suspected carcinogen)	174	-
	2-Propanol	983	1,230
	Naphtha (petroleum), heavy alkylate (supplier)	1200	-
	Butane	1900	-
	Propane	Simple Asphyxiant	-
Additional Information:	Wash hands before eating, drinking and smoking. Avoid breathing vapours/spray. In case of inadequate ventilation wear respiratory protection.		
Engineering Controls:	No controls required when handling small quantities. Use with adequate ventilation.		
	Larger quantities: General exhaust is adequate unde equipment should be explosion-resistant.	er normal operating condi	tions. Ventilation
Protective Equipment:	No special equipment for minor exposure i.e. when has chemical goggles and protective clothing are recomm TWA is exceeded, wear an approved respirator with	mended if used in an indu	, , ,

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Clear, colourless volatile liquid.
pH:	Not applicable.
Vapour Density:	> 1 (Air =1)
Vapour Pressure, kPa:	300 - 600
Boiling Point, °C:	Not applicable.
Melting Point, °C:	Not applicable.
Specific Gravity:	Not applicable.
Flash Point, °C:	< 0
Explosion Limit, % v/v:	LEL 1.2% UEL 9.5%
Autoignition Temp, °C:	Not applicable.
Solubility:	Partially miscible in water. Soluble in common organic solvents.

Section 10 – STABILITY AND REACTIVITY

Stability:

Stable under normal conditions of use and storage. Not reactive. Avoid oxidisers. Avoid magnesium, aluminium and their alloys, brass and steel. Avoid elevated temperatures.

Section 11 – TOXICOLOGICAL INFORMATION

Basis for Assessment:	Information given is based on product testing, and/or similar products, and/or components.
Acute Oral Toxicity:	Moderate toxicity: LD50 calculated to be > 2000 mg/kg, Rat (based on component mixture).
Acute Dermal Toxicity:	Low toxicity: LD50 estimated to be > 2000 mg/kg, Rabbit (based on component mixture).
Acute Inhalation Toxicity:	LC50 estimated to be 44 mg/L, 4 hour, Rat (based on component mixture).
Ingestion :	Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.
	Not normally a hazard due to physical form of product. Considered an unlikely route of entry in in industrial environments.
Skin Irritation:	May cause mild skin irritation. Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.
	The material may cause severe inflammation of the skin either following direct contact or after a delay of some time. Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.
	Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.
	Spray mist may produce discomfort
Eye Irritation:	Vapours may be irritating to the eye. There is some evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure.
	Not considered to be a risk because of the extreme volatility of the gas.
Respiratory Irritation:	Inhalation of vapours or mists may cause irritation to the respiratory system.
	High concentrations of vapour may cause central nervous system depression resulting in headaches, dizziness and nausea. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.
	Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual. There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.
Sensitisation:	Product is a respiratory and contact sensitiser. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.
Chronic Toxicity:	There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment.
	Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.
	There is some evidence from animal testing that exposure to this material may result in reduced fertility. Based on experience with animal studies, there is a possibility that exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother.
	Principal route of occupational exposure to the gas is by inhalation.
Additional Information:	Dichloromethane exposures cause liver and kidney damage in animals and this justifies consideration before exposing persons with a history of impaired liver function and/or renal disorders. Dichloromethane (Methylene Chloride) has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.
Section 12 – ECOTOXICIT	Y INFORMATION
Ecotoxicity:	Very toxic in aquatic environments. Harmful to aquatic life with long lasting effects.

Persistence/degradability:	Majority of components are expected to be inherently biodegradable. More volatile components
	expected to degrade rapidly in air.

Bioaccumulation: Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

Section 13 – DISPOSAL C	ONSIDERATIONS
Material Disposal:	Product wastes are considered ecotoxic and should be disposed of in accordance with applicable laws and regulations. Do not dispose into the environment, in drains or in water courses. Waste product should not be allowed to contaminate soil or water.
Container Disposal:	Pressurised container: Do not pierce or burn, even after use. Recycle empty container if possible. Large quantities should be degassed by an aerosol recycler. Do not dispose of large quantities of pressurised aerosols in landfills.
	Product containers are also considered wastes of the same class of the contents and should be disposed of in accordance with applicable laws and regulations.
Section 14 – TRANSPORT	r information
Transport:	Classified as a dangerous goods according to the NZ Land Transport Rule for road and rail, IMDG fo sea, IATA for air.
	Class 2.1 should not be loaded on the same vehicle as Classes 1, 3 (where both are in bulk), 4, 5, and 7. They may be loaded with Classes 3, 6, 8, 9, foodstuffs and foodstuff empties.
Proper Shipping Name:	Aerosols
UN Number:	1950
Dangerous Goods Class:	2.1
Subsidiary Risk:	Not applicable
Packing Group:	Not applicable
Section 15 – REGULATOR	RY INFORMATION

EPA Classification Number: HSR000346 Flammable Aerosol containing 4.5 g/litre permethrin, 8.35 g/litre piperonyl butoxide. Also contains methylene chloride.

Section 16 – OTHER INFORMATION

This MSDS summarises our best knowledge of the health and safety hazard information. Since we cannot control the conditions under which the product may be used, each user must review this MSDS in the context of how the user intends to use the product.

End of msds.