

Material Safety Data Sheet

CLASSIFIED AS HAZARDOUS ACCORDING TO CRITERIA OF NOHSC

1. IDENTIFICATION OF THE PREPARATION AND THE COMPANY

Product name ACTIVE AIR AEROSOL METERED INSECTICIDE
Product use: Insecticide for use in wall mounted automatic dispenser
Company: 3C Chemical Laboratories Pty Limited
Address: Unit 5, 350 Edgar Street
 Condell Park
Telephone: 02.9773 4000
Fax: 02.9773 4500
EMERGENCY TELEPHONE NUMBER: 02.9773 4000 (Business hours)

2. HAZARDS IDENTIFICATION

Hazard classification

- Classified as hazardous according to criteria of NOHSC.
- Classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Risk & Safety Phrases

R11 – Highly flammable.
 R36 – Irritating to eyes.
 S16 – Keep away from sources of ignition – No smoking.
 S2 – Keep out of reach of children.
 S24/25 – Avoid contact with skin and eyes.

3. COMPOSITION / INFORMATION ON INGREDIENTS

| Component | CAS | Proportion (%) |
|--|------------|----------------|
| Alcohol | 64-17-5 | 30-80 |
| Hydrocarbon Propellant | 68476-85-7 | 30-60 |
| Piperonyl Butoxide | 51-03-6 | < 10% |
| Pyrethrum | 8003-34-7 | > 5% |
| Other ingredients determined not to be hazardous | - | Balance |

4. FIRST AID MEASURES

Route of exposure

Inhalation: Remove to fresh air. Lay patient down. Keep warm and rested. If breathing is shallow or has stopped, ensure airway is clear and apply resuscitation. Transport to hospital or doctor.

Ingestion: If swallowed, do NOT induce vomiting. Contact a Poisons Information Centre (Phone 13 1126) or a doctor at once.

Eye contact: Immediately hold the eyes open and flush with fresh running water. Ensure irrigation under the

PRODUCT NAME : ACTIVE AIR AEROSOL METERED INSECTICIDE
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 REVISION DATE : 11.8.2008

Material Safety Data Sheet

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eyelids by occasionally lifting upper and lower lids. If pain persists, or recurs, seek medical attention. Removal of contact lenses after an eye injury should be undertaken by skilled personnel.

Skin contact: Wash affected area thoroughly with water and soap if available. Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation.

Other information

Advice to doctor: Treat symptomatically.

First aid facilities: Eye wash and normal washroom facilities should be available.

5. FIRE-FIGHTING MEASURES

Specific hazards: Liquid and vapour are highly flammable. In the case of fire, aerosols will explode. Keep away from all heat sources.

Hazardous combustion products: This product is highly flammable. Thermal decomposition will result in the release of toxic/irritating fumes including CO and CO₂.

Suitable extinguishing media: Water fog, foam or dry agent.

Special protective precautions and equipment for fire-fighter's: Fire-fighter's should wear self-contained breathing apparatus and full protective clothing. Fight fire from protected position or use unmanned hose holders or monitor nozzles. If safe to do so, move undamaged containers from fire area – Do not approach hot containers. Cool containers with water before handling. If impossible to extinguish fire, protect surroundings, withdraw from area and allow fire to burn.

Hazchem code: 2Y.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures: ELIMINATE all ignition sources (no smoking, flares, sparks or flames) within at least 15m. All equipment used when handling the product must be earthed. If water is available, spray leaking containers to reduce ignition hazard and disperse gas. Isolate area until gas has dispersed. Ventilate the area.

Personal precautions: For small spills wear suitable protective clothing e.g. impervious gloves and overalls. For large spills wear Self-Contained Breathing Apparatus (SCBA) and full protective clothing. See Section 8 of this MSDS for more information.

Methods and material for containments and clean up: Clean up spills immediately. Avoid breathing vapours and skin. Increase ventilation. Small spills may be wiped up. For large spills, alert Fire Brigade. Prevent spillage from entering drains or watercourse. Absorb or cover spill with inert, non-combustible absorbent (e.g. sand, earth or vermiculite). Keep away from smoking, naked lights or ignition ventilation. Increase ventilation.

7. HANDLING AND STORAGE

Handling: Avoid contact with incompatible materials. Keep away from smoking, naked lights or ignition sources. Liquid and vapour are highly flammable. In the case of fire, aerosols will explode. Keep away from all heat sources.

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| PRODUCT NAME | : | ACTIVE AIR AEROSOL METERED INSECTICIDE |
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Material Safety Data Sheet

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Storage: Store in a cool, well-ventilated area away from incompatible materials (see Section 10 for more information). Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of cans. Store away from sources of heat and ignition.

Hygiene: Avoid eye contact. Avoid prolonged skin contact. Avoid contact with eyes and prolonged skin contact. When using do not eat, drink or smoke. Wash hands after use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection: Not normally required. In the unlikely event that respiratory protection is required (e.g. emergency situations) then a supplied air respirator should be used.

Eye protection: Not normally required. However, if risk of eye contact exists safety glasses with side shields or chemical safety goggles should be worn.

Hand protection: Not normally required. However, if prolonged or repeated skin contact is expected suitable protective gloves (e.g. PVC or rubber) should be worn.

Body protection: Not normally required. However, if prolonged or repeated skin contact is expected appropriate protective clothing should be worn e.g. long-sleeved shirt and pants, overalls, etc.

Exposure limits: The following NOHSC (National Occupational Health & Safety Commission) exposure limits apply:

| | TWA | | STEL | |
|---------|------------|-------------------|------|-------------------|
| | ppm | mg/m ³ | ppm | mg/m ³ |
| Ethanol | 1000 | 1880 | - | - |
| Butane | 800 | 1900 | - | - |
| Propane | Asphyxiant | | - | - |

Refer to NOHSC publication "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" for further information on exposure standards.

Engineering controls: Natural ventilation is adequate under normal use.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|------------------------------------|--|
| Appearance | Clear, golden coloured liquid. Supplied as an aerosol. |
| Odour | Not available |
| pH | Not available |
| Vapour pressure | As for water |
| Vapour density | Not available |
| Boiling point | 78.0°C |
| Melting point | Not available |
| Solubility | Miscible in water |
| Specific gravity | 0.08g/mL |
| Flash point | Approx 16.0°C tag closed cup |
| Flammability limits – lower | 3.5% |
| – upper | 19.0% |
| Ignition temperature | Not available |

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Material Safety Data Sheet

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10. STABILITY AND REACTIVITY

Chemical stability: Stable.

Conditions to avoid: High temperatures, heat, flames and static electricity.

Incompatible materials: Strong oxidizers, acids, bases, potassium dioxide, bromine pentafluoride, acetyl bromide, acetyl chloride, platinum, sodium, chlorine, fluorine.

Hazardous decomposition: Thermal decomposition will result in the release of toxic/irritating fumes including CO and CO₂.

Hazardous reactions: May react violently with the incompatible materials listed above.

11. TOXICOLOGICAL INFORMATION

Toxicology data:

No toxicology data available for this product. However, for product components the following data applies:

Butane

LC50 (Inhalation, rat) = 658 g/m³/4H.

Ethanol

LD50 (Oral, rat) = 6200 mg/kg.

LD50 (Inhalation, rat) > 8000 mg/l/4h.

LD50 (Dermal. Rabbit) > 20000 mg/kg.

Piperonyl Butoxide

LD50 (Oral, rat) = 11.5 g/kg.

Pyrethrum

LD50 (Oral, rat) = 584 to 900 mg/kg.

LC50 (Inhalation, rat) = 3.4 mg/l/4 hr.

Acute health hazards

Ingestion: Considered an unlikely route of entry in commercial/industrial environments. The liquid is discomforting to the gastro-intestinal tract. Ingestion may result in nausea, abdominal irritation, pain, vomiting and CNS depression.

Inhalation: The mist is discomforting to the upper respiratory tract. Not considered an irritant through normal use. Inhalation of high concentrations may cause CNS depression. Contains Propane which in high concentrations can have an asphyxiant effect. WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

Skin contact: The material may be discomforting to the skin if exposure is prolonged or from repeated exposures over long periods. Not considered an irritant through normal use.

Eye contact: The mist is highly discomforting to the eyes. Not considered an irritant through normal use.

| | | |
|---------------|---|--|
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| VERSION | : | 1.1 |
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Material Safety Data Sheet

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Chronic health hazards

Prolonged or repeated skin contact may defat the skin. Prolonged inhalation of high vapour concentrations may have effects on the upper respiratory tract and central nervous system, resulting in irritation, headache, fatigue and lack of concentration.

Other information

Principal routes of exposure are usually by skin contact and inhalation of spray mist/vapour. Warning: Aerosol containers may present pressure related hazards. As with any chemical, ingestion, inhalation and prolonged or repeated skin contact should be by good occupational work practice.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No ecotoxicity data available for this product. However, for product components the following data applies:

Ethanol

EC50 (Daphnia magna): 9268-14221 mg/L/48h.

Piperonyl Butoxide

LC50 (Bluegill) = 4.2 ug/l/96 hr.

Pyrethrum

LC50 (Lepomis macrochirus – Bluegill) = 58 ug/l/96hr .

Persistence and degradability: Not available

Mobility: Not available

Bio-accumulation: Not available

Other information: Prevent entry into drains, waterways and sewers.

13. DISPOSAL CONSIDERATIONS

Disposal methods and containers: Dispose of product and empty containers according to relevant local, state and federal government regulations.

Special precautions for landfill or incineration: Do not incinerate this product! Aerosols are explosive when exposed to fire.

Other information: It is the responsibility of the generator of the waste to ensure proper waste classification, transportation and disposal. Classify waste under applicable state and local regulations. The information contained in this document applies to the material as manufactured. Processing, use or contamination may make the information inappropriate, inaccurate or incomplete.

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14. TRANSPORT INFORMATION

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| | |
|----------------------------------|----------------|
| UN Number | 1950 |
| UN Proper Shipping Name | AEROSOLS |
| Class and subsidiary risk | 2.1 |
| Packing Group | Not applicable |
| Emergency Guide | 2D1 |
| Hazchem Code | 2Y |

15. REGULATORY INFORMATION

Poisons Schedule: Not scheduled

AICS status: All ingredients are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Preparation date: 10.5.2004

References

- Standard for the Uniform Scheduling of Drugs and Poisons No. 18 – National Drugs and Poisons Schedule Committee.
- 3C Chemical Laboratories – MSDS for Airomist Aerosol Metered Insecticide (Date of Issue: March 2003).
- Australian Dangerous Goods Code 6th Edition – National Road Transport Commission.
- International Chemical Safety Card ICSC: 0044 – Ethanol (Anhydrous).
- Dangerous Goods – Initial Emergency Response Guide –Standards Australia/New Zealand.
- 3M Australia – Respirator Selection Handbook 2003.
- NIOSH Pocket Guide to Chemical Hazards
- Merck Pty Limited – MSDS for Ethanol Absolute Extra Pure BP, USP (Date of Issue: January 2002).
- BOC Gases – MSDS for Butane: Review Date 6/7/96.

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

...End of MSDS...

Prepared by SGS Environmental Services

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