# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<table>
<thead>
<tr>
<th>Supplier Name</th>
<th>JOHNSONDIVERSEY AUSTRALIA PTY LTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>29 Chifley St, Smithfield, NSW, AUSTRALIA, 2164</td>
</tr>
<tr>
<td>Telephone</td>
<td>(02) 9757 0300</td>
</tr>
<tr>
<td>Fax</td>
<td>(02) 9725 5767</td>
</tr>
<tr>
<td>Emergency</td>
<td>1800 033 111 (24 hrs)</td>
</tr>
<tr>
<td>Email</td>
<td></td>
</tr>
<tr>
<td>Web Site</td>
<td><a href="http://www.johnsondiversey.com">http://www.johnsondiversey.com</a></td>
</tr>
</tbody>
</table>

**Synonym(s):** 739400 RAID ODORLESS FLY AND INSECT KILLER 12 X 400G  
**Use(s):** AEROSOL DISPENSED, FLY SPRAY, INSECTICIDE

# 2. HAZARDS IDENTIFICATION

**NOT CLASSIFIED AS HAZARDOUS ACCORDING TO NOHSC CRITERIA**

**UN No.:** 1950  
**Hazchem Code:** 2Y  
**Pkg Group:** None Allocated  
**DG Class:** 2.1  
**Subsidiary Risk(s):** None Allocated  
**Hazchem Code:** 2Y  
**EPG:** 2D1

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Formula</th>
<th>Conc.</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIQUEFIED PETROLEUM GAS (LPG)</td>
<td>C3H8/C3H6/C4H10/C4H8</td>
<td>30%</td>
<td>68476-85-7</td>
</tr>
<tr>
<td>HYDROTREATED HEAVY NAPHTHA (PETROLEUM)</td>
<td>Not Available</td>
<td>1.7%</td>
<td>64742-48-9</td>
</tr>
<tr>
<td>PERMETHRIN</td>
<td>C21-H20-C12-O3</td>
<td>&lt;0.2%</td>
<td>52645-53-1</td>
</tr>
<tr>
<td>SODIUM NITRITE</td>
<td>NaNO2</td>
<td>&gt;0.2%</td>
<td>7632-00-0</td>
</tr>
<tr>
<td>NON HAZARDOUS INGREDIENTS</td>
<td>Not Available</td>
<td>&gt;60%</td>
<td>Not Available</td>
</tr>
<tr>
<td>TETRAMETHRIN</td>
<td>C19-H25-N-O4</td>
<td>&lt;0.5%</td>
<td>7696-12-0</td>
</tr>
</tbody>
</table>

# 4. FIRST AID MEASURES

**Eye:** Hold eyelids apart and flush continuously with water. Continue until advised to stop by the Poisons Information Centre, a doctor, or for at least 15 minutes. Keep patient calm.  
**Inhalation:** If over exposure occurs leave exposure area immediately. If irritation persists, seek medical attention.  
**Skin:** Gently flush affected areas with water. Seek medical attention if irritation develops.  
**Ingestion:** For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor. If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.  
**Advice to Doctor:** Treat symptomatically  
**First Aid Facilities:** Eye wash facilities should be provided.
PRODUCT NAME  RAID COMMERCIAL INSECTICIDE ODORLESS FLY AND INSECT KILLER

5. FIRE FIGHTING MEASURES

Flammability
Highly flammable. Vapours may form explosive mixtures with air. May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition. Eliminate all ignition sources including cigarettes, open flames, spark producing switches/tools, heaters, naked lights, pilot lights, mobile phones etc. when handling. Aerosol cans may explode when heated above 50 C.

Fire and Explosion
Highly flammable - explosive vapour. Evacuate area and contact emergency services. Toxic gases may be evolved when heated. Remain upwind and notify those downwind of hazard. Wear full protective equipment (see spill above) including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

Extinguishing
Dry agent, carbon dioxide, foam or water fog. Prevent contamination of drains or waterways, absorb runoff with sand or similar.

Hazchem Code
2Y

6. ACCIDENTAL RELEASE MEASURES

Spillage
If aerosol can damaged/leaking, ventilate and clear area of all unprotected personnel. Wear splash-proof goggles, PVC/rubber gloves, a Type A-Class P1 (Organic vapour and Particulate) respirator (where an inhalation risk exists) and coveralls. Collect and allow to discharge outdoors. Absorb residues with sand or similar and place in clean containers for disposal.

7. STORAGE AND HANDLING

Storage
Store in cool, dry, well ventilated area, removed from oxidising agents, acids, alkalis, direct sunlight, heat or ignition sources, foodstuffs, out of direct sunlight and out of the reach of children. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate fire protection.

Handling
Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas (eg. if container is damaged).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation
Do not inhale vapours. Use in well ventilated areas. In poorly ventilated areas, mechanical extraction ventilation is recommended. Flammable/explosive vapours may accumulate in poorly ventilated areas. Vapours are heavier than air and may travel some distance to an ignition source and flash back. Maintain vapour levels below the recommended exposure standard.

Exposure Standards
LIQUEFIED PETROLEUM GAS (LPG) (68476-85-7)
ES-TWA: 1000 ppm (1800 mg/m3)
WES-TWA: 1000 ppm (1800 mg/m3)
HYDROTREATED HEAVY NAPTHA (PETROLEUM) (64742-48-9)
ES-STEL : 400 ppm (1800 mg/m3)
TETRAMETHRIN (7696-12-0)
ES-STEL : 10 mg/m3 - Pyrethrins (ACGIH)
ES-TWA: 5 mg/m3 - Pyrethrins (ACGIH)

PPE
With prolonged use, wear safety glasses, splash-proof goggles and rubber or PVC gloves. Where an inhalation risk exists, wear a Type A-Class P1 (Organic vapour and Particulate) Respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance:</td>
<td>CLEAR LIQUID (AEROSOL DISPENSED)</td>
</tr>
<tr>
<td>Odour:</td>
<td>ODORLESS</td>
</tr>
<tr>
<td>pH:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Vapour Pressure:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Vapour Density:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Exposure Standard:</td>
<td>184 ppm Manufacturer's recommendation</td>
</tr>
<tr>
<td>Solubility (water):</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Specific Gravity:</td>
<td>0.80 - 0.82</td>
</tr>
<tr>
<td>% Volatiles:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Flammability:</td>
<td>HIGHLY FLAMMABLE</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&lt; 20 C (PROPELLANT)</td>
</tr>
<tr>
<td>Upper Explosion Limit:</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Lower Explosion Limit:</td>
<td>NOT RELEVANT</td>
</tr>
<tr>
<td>Autoignition Temperature:</td>
<td>NOT AVAILABLE</td>
</tr>
<tr>
<td>Hazchem Code:</td>
<td>2Y</td>
</tr>
</tbody>
</table>
PRODUCT NAME: RAID COMMERCIAL INSECTICIDE ODORLESS FLY AND INSECT KILLER

10. STABILITY AND REACTIVITY

Reactivity: Incompatible with oxidising agents (e.g. hypochlorites, peroxides), acids (e.g. sulphuric acid), strong alkalis (e.g. hydroxides), heat and ignition sources.

Decomposition Products: May evolve toxic gases (carbon oxides, hydrocarbons) when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary:

This product has the potential to cause adverse health effects with chronic or high level exposure. Use safe work practices (i.e. do not overspray or contaminate non target areas) to avoid eye-skin contact and vapour inhalation.

Eye Contact: May result in lacrimation, irritation, pain, redness and conjunctivitis. Prolonged contact - corneal burns and possible permanent damage.

Inhalation: Over exposure may result in mucous membrane irritation of the respiratory tract and sneezing. At high levels, pyrethrins may cause breathing difficulties (wheezing) and sensitisation with asthma like symptoms.

Skin: Prolonged contact may result in irritation, redness, rash, dermatitis and sensitisation. Toxic effects may result from skin absorption.

Ingestion: Due to product form (aerosol container) ingestion is considered highly unlikely.

Toxicity Data:

<table>
<thead>
<tr>
<th>Compound</th>
<th>LC50 (Inhalation)</th>
<th>LD50 (Ingestion)</th>
<th>LD50 (Skin)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMETHRIN</td>
<td>485 mg/m3 (rat)</td>
<td>383 mg/kg (rat)</td>
<td>1750 mg/kg (rat)</td>
</tr>
<tr>
<td>SODIUM NITRITE</td>
<td>5.5 mg/m3/4 hours (rat)</td>
<td>180 mg/kg (rat)</td>
<td></td>
</tr>
<tr>
<td>TETRAMETHRIN</td>
<td>2 g/m3 (mouse)</td>
<td>1000 mg/kg (mouse)</td>
<td>2500 ug/kg (rat)</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Environment: Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: For small amounts absorb contents with sand or similar and dispose of to an approved landfill site. Do not puncture or incinerate aerosol cans. Contact the manufacturer for additional information.

Legislation: Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

Shipping Name: AEROSOLS

UN No.: 1950  Hazchem Code: 2Y  Pkg Group: None Allocated
DG Class: 2.1  Subsidiary Risk(s): None Allocated  EPG: 2D1

15. REGULATORY INFORMATION

Poison Schedule AICS: A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information: Contains < 0.1 % Benzene.

SYNERGISM - ANTAGONISM: Ingredients in this product may act together to aggravate or reduce adverse effects. Accordingly the time weighted average concentration (TWA) provided for single ingredients should be considered as a guide only and all due care exercised when handling.

AEROSOL CANS may explode at temperatures approaching 50 C.

ABBREVIATIONS:
mg/m3 - Milligrams per cubic metre
ppm - Parts Per Million
RAID COMMERCIAL INSECTICIDE ODORLESS FLY AND INSECT KILLER

TWA/ES - Time Weighted Average or Exposure Standard.
CNS - Central Nervous System
NOS - Not Otherwise Specified
pH - relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline.
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
M - moles per litre, a unit of concentration.
IARC - International Agency for Research on Cancer.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:
It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Report Status
This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this MSDS.

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MSDS Date: 25 October 2006
End of Report