SAFETY DATA SHEET

HOSPIPLUS PYTECH METERED INSECTICIDE

1. IDENTIFICATION

GHS Product Identifier
HOSPIPLUS PYTECH METERED INSECTICIDE

Company Name
HOSPECO PTY LTD

Address
17 Elizabeth Street Wetherill Park
NSW 2164 AUSTRALIA

Telephone/Fax Number
Tel: +61 2 9756 0055
Fax: +61 2 9756 0095

Emergency phone number
1800 638 556

Recommended use of the chemical and restrictions on use
For control of flying and crawling insects. Sold as an aerosol fitted with an automatic metered dispenser.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia
Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)
Carcinogenicity: Category 1
Eye Damage/Irritation: Category 2A
Flammable Aerosol: Category 1
Germ cell mutagenicity category 1A
Hazardous to the Aquatic Environment - Acute Hazard: Category 1
Hazardous to the Aquatic Environment - Long-Term Hazard: Category 1
STOT Single Exposure: Category 3 (narcotic)

Signal Word (s)
DANGER

Hazard Statement (s)
H222 Extremely flammable aerosol.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H340 May cause genetic defects.
H350 May cause cancer.
H410 Very toxic to aquatic life with long lasting effects.

Pictogram (s)
Flame, Exclamation mark, Health hazard, Environment
Precautionary statement – Prevention
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash contaminated skin thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statement – Response
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P337+P313 If eye irritation persists: Get medical advice/attention.
P391 Collect spillage.

Precautionary statement – Storage
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50ºC/122ºF.

Precautionary statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>64-17-5</td>
<td>30-60 %</td>
</tr>
<tr>
<td>PETROLEUM GASES, LIQUEFIED</td>
<td>68476-85-7</td>
<td>30-60 %</td>
</tr>
<tr>
<td>Piperonyl butoxide</td>
<td>51-03-6</td>
<td>1-10 %</td>
</tr>
<tr>
<td>Pyrethrins</td>
<td>8003-34-7</td>
<td>1-10 %</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

Inhalation
If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion
Unlikely due to form of product. However, if ingested, do not induce vomiting. Wash out mouth thoroughly with water. If symptoms develop seek medical attention.

Skin
Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Eye contact
If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. Seek medical attention.
First Aid Facilities
Eyewash, safety shower and normal washroom facilities.

Advice to Doctor
Treat symptomatically.

Other Information
For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media
Do not use water.

Hazards from Combustion Products
Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide and carbon dioxide.

Specific Hazards Arising From The Chemical
Contents under pressure - cans can explode in a fire. This product is extremely flammable. Keep containers and fire-exposed surfaces cool with water spray. Shut off any leak if safe to do so and remove sources of re-ignition. Vapour/air mixtures may ignite explosively. Flashback along the vapour trail may occur. Runoff to sewer may create fire or explosion hazard.

Hazchem Code
2YE

Decomposition Temperature
Not available

Precautions in connection with Fire
Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) operated in positive pressure mode. In case of fire the product may be violently or explosively reactive. Use water spray to disperse vapours. This product should be prevented from entering drains and watercourses.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Extinguish or remove all sources of ignition and stop leak if safe to do so. Wear appropriate personal protective equipment and clothing to prevent exposure. Evacuate all unprotected personnel. Water spray or fog may be used to disperse/absorb vapour if any. Place inert, Non combustible absorbent material onto spillage. If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely. Collect residues and seal in labelled drums for disposal. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations. Dispose of waste according to applicable local and national regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling
EXTREMELY FLAMMABLE. VAPOUR OR GAS REDUCES OXYGEN FOR BREATHING. IN CONFINED SPACES MAY CAUSE ASPHYXIATION. Wear appropriate personal protective equipment and clothing to prevent exposure. Handle and use the material in a well-ventilated area, away from sparks, flames and other ignition sources. DO NOT store or use in confined spaces. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Build up of mists or vapours in the atmosphere must be prevented. Do NOT cut or heat containers as they may contain hazardous residues. Do not smoke. Flameproof equipment is necessary in areas where the product is being used. Take precautionary measures against static discharges. Earth or bond all equipment. Do not empty into drains. Ensure a high level of personal hygiene is maintained when using this product, that is, always wash hands before eating, drinking, smoking or using the toilet facilities. Avoid exposure. Do not handle until all safety precautions have been read and understood.
Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well ventilated area away from sources of ignition, oxidising agents, foodstuffs, clothing and out of direct sunlight. Do not expose can to temperatures exceeding 50°C. Protect containers against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Do NOT pressurise, cut or heat aerosol containers. Content is under pressure and can explode violently. Ensure that storage conditions comply with applicable local and national regulations. For information on the design of the storeroom, reference should be made to Australian Standard AS 2278.1—2008 Non-refillable metal aerosol dispensers of capacity 50 mL to 1000 mL inclusive.

Storage Temperatures
<=50°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values
No exposure standards have been established for this material. However, the available exposure limits for ingredients are listed below:

Ethanol
TWA: 1000 ppm, 1880 mg/m³

Liquified Petroleum gas
TWA: 1000 ppm, 1800 mg/m³

Pyrethrins
TWA: 5 mg/m³
NOTE: Sen

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.
‘Sen’ Notice: The substance may cause sensitization by skin contact or by inhalation.

Biological Limit Values
No biological limits allocated.

Other Exposure Information
Liquified Petroleum gas is an asphyxiant gas which when present in an atmosphere in high concentration, leads to reduction of oxygen concentration by displacement or dilution. It is not appropriate to recommend an exposure standard for each simple asphyxiant, rather it should be required that a sufficient oxygen concentration be maintained.

Appropriate Engineering Controls
This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.
Refer to AS 2865 Australian Standard Safe working in a confined space, for further information concerning ventilation requirements.

Respiratory Protection
If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable filter should be used. Reference should be made to Australian/New Zealand Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye Protection
Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection devices should conform with Australian/New Zealand Standard AS/NZS 1337 - Eye Protectors for Industrial Applications.

Hand Protection
Wear gloves of impervious material such as Neoprene, butyl rubber, nitrile rubber, nitrile rubber and PVC. Final choice of appropriate gloves will vary according to individual circumstances i.e. methods of handling or according to risk assessments undertaken. Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.
Body Protection
Suitable protective work wear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form
Aerosol

Appearance
Clear golden liquid spray in aerosol can

Colour
Golden

Odour
Spicy alcoholic odour

Decomposition Temperature
Not available

Melting Point
Not available

Boiling Point
Not available

Solubility in Water
Immiscible

Specific Gravity
Not available

pH
Not available

Vapour Pressure
Not available

Vapour Density (Air=1)
Not available

Evaporation Rate
Not available

Odour Threshold
Not available

Viscosity
Not available

Partition Coefficient: n-octanol/water
Not available

Density
Not available

Flash Point
Not available

Flammability
Extremely flammable aerosol

Auto-Ignition Temperature
Not available

Flammable Limits - Lower
Not available

Flammable Limits - Upper
Not available
10. STABILITY AND REACTIVITY

Reactivity
Not available

Chemical Stability
Stable under normal conditions of storage and handling.

Conditions to Avoid
Heat, direct sunlight, flames and other sources of ignition.

Incompatible materials
Strong oxidising agents.

Hazardous Decomposition Products
Thermal decomposition may result in the release of toxic and/or irritating fumes, smoke and gases including: carbon dioxide and carbon monoxide.

Possibility of hazardous reactions
Not available

Hazardous Polymerization
Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Available toxicity data for the ingredients is given below.

Acute Toxicity - Oral
Ethanol
LD50 (rat): 7060 mg/kg
Piperonyl butoxide
LD50 (mouse): 2600 mg/kg
LD50 (rabbit): 2650 mg/kg
LD50 (rat): 6150 mg/kg
Pyrethrins
LD50 (rat): 200 mg/kg

Acute Toxicity - Inhalation
Ethanol
LC50 (rat): 20,000 ppm/10h
LC50 (rat): 64000 ppm/4h

Acute Toxicity - Dermal
Piperonyl butoxide
LD50 (rat): 200 mg/kg
LD50 (rat): >7950 mg/kg
Pyrethrins
LD50 (rabbit): 300 mg/kg

Ingestion
Unlikely due to form of product. If ingestion occurs, may cause irritation to the gastrointestinal system. Symptoms may include nausea, vomiting, diarrhoea and abdominal pain.

Inhalation
May cause irritation to the mucous membrane and upper airways, especially where vapours or mists are generated. Symptoms include sneezing, coughing, wheezing, shortness of breath, headache, dizziness, drowsiness, nausea and vomiting.

Liquified Petroleum gas is an asphyxiant gas which when present in an atmosphere in high concentration, leads to reduction of oxygen concentration by displacement or dilution. Symptoms include decreased visual acuity, decreased coordination and judgment, headache, dizziness, confusion, drowsiness, fatigue, shortness of breath, muscular weakness, convulsions, unconsciousness, coma and eventually death.

Skin
May be irritating to skin. The symptoms may include redness and itching.

Ethanol
Skin (rabbit): 20 mg/24hr: moderate
Skin (rabbit): 400 mg (open): mild

**Eye**
Causes serious eye irritation. On eye contact this product will cause tearing, stinging, blurred vision, and redness.

Ethanol
Eye (rabbit): 500 mg: SEVERE
Eye (rabbit): 100 mg/24hr: moderate

**Respiratory sensitisation**
Not expected to be a respiratory sensitiser.

**Skin Sensitisation**
Not expected to be a skin sensitiser.

**Germ cell mutagenicity**
May cause genetic defects. Classified as Known or presumed to induce heritable mutations.

**Carcinogenicity**
May cause cancer. Classified as a Known or presumed human carcinogen.

Piperonyl butoxide listed as Group 3: Not classifiable as to carcinogenicity to humans according to International Agency for Research on Cancer (IARC).

**Reproductive Toxicity**
Not considered to be toxic to reproduction.

**STOT-single exposure**
May cause drowsiness or dizziness.

**STOT-repeated exposure**
Not expected to cause toxicity to a specific target organ.

**Aspiration Hazard**
Not expected to be an aspiration hazard.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Very toxic to aquatic life with long lasting effects.

**Persistence and degradability**
Not available

**Mobility**
Not available

**Bioaccumulative Potential**
Not available

**Other Adverse Effects**
Not available

**Environmental Protection**
Do not discharge this material into waterways, drains and sewers.

### 13. DISPOSAL CONSIDERATIONS

**Disposal considerations**
Dispose of waste according to applicable local and national regulations. Do not pierce, burn, cut, puncture or weld on or near containers. Empty containers may contain hazardous residues. Empty the container completely before disposal. Contaminated containers must not be treated as household waste. Advise flammable nature. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.
14. TRANSPORT INFORMATION

Transport Information
Road and Rail Transport (ADG Code):
This material is classified as Dangerous Goods Division 2.1 - Flammable Gases according to the Australian Code for the Transport of Dangerous Goods by Road or Rail. (7th edition)
Division 2.1 Dangerous Goods are incompatible in a placard load with any of the following:
- Class 1, Explosives
- Division 2.2 Non-flammable, Non toxic gases that have a subsidiary risk 5.1 except when all are packed in cylinders or pressure drums not exceeding 500L capacity.
- Class 3, Flammable Liquids, if both the Division 2.1 and Class 3 dangerous goods are in tanks or other receptacles with a capacity individually exceeding 500L.
- Division 4.1, Flammable Solids
- Division 4.2, Spontaneously Combustible Substances
- Division 4.3, Dangerous When Wet Substances
- Division 5.1, Oxidising substances
- Division 5.2, Organic Peroxides
- Class 7, Radioactive Substances

Marine Transport (IMO/IMDG):
Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.
Proper Shipping Name: AEROSOLS
UN-No: 1950
Division: 2.1
EmS: F-D,S-U
Special Provisions: 63, 190, 277, 327, 344, 959

Air Transport (ICAO/IATA):
Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.
Proper Shipping Name: AEROSOLS, FLAMMABLE
UN-No: 1950
Division: 2.1
Label: Flammable gas
Packaging Instructions (cargo only): 203
Packaging Instructions (passenger & cargo): 203
Special Provisions: A145, A167, A802

U.N. Number
1950

UN proper shipping name
AEROSOLS

Transport hazard class(es)
2.1

Hazchem Code
2YE

IERG Number
49

IMDG Marine pollutant
Yes

Transport in Bulk
Not available

Special Precautions for User
Not available
15. REGULATORY INFORMATION

Regulatory information
Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.
Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule
Not Scheduled

Australia (AICS)
All components of this product are listed on the Inventory or exempted.

16. OTHER INFORMATION

Date of preparation or last revision of SDS
SDS Created: December 2015

References
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice
Standard for the Uniform Scheduling of Medicines and Poisons.
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Workplace exposure standards for airborne contaminants, Safe work Australia.
American Conference of Industrial Hygienists (ACGIH)
Globally Harmonised System of classification and labelling of chemicals.

END OF SDS