MATERIAL SAFETY DATA SHEET

Company Details

Farmoz Pty Ltd, Suite 2, Edgecliff Court 2 New McLean St, Edgecliff, NSW 2027

Telephone (02)9363 3611 (24 hours) Fax (02)9363 5977

ACN 050 328 973

Hazardous according to the criteria of NOHSC Australia.

I IDENTIFICATION

Product Name: Farmoz Hellfire 500 EC

Other Names: None.
Product Code: None.
UN No: None allocated

Hazchem Code: None allocated

Dangerous Goods Class: None allocated

<u>Sub Risk Class:</u> None allocated <u>Packaging Group:</u> None allocated

Poison Schedule: S6

<u>Chemical Family:</u> Blend of ingredients (see below). Active ingredient is a pyrethroid insecticide.

<u>Uses:</u> Agricultural insecticide for the control of insects as shown on the product label.

Physical Appearance & Properties

Appearance & Odour: Clear liquid. Mild odour.

Melting/softening point: No specific data. Liquid at normal temperatures.

Boiling point and vapour pressure: No data.

Volatile materials: No specific data. Expected to be low at 100°C.

Flashpoint: Not flammable.

Specific gravity: No data.

Solubility in water: Emulsifiable.

Corrosiveness: Not corrosive.

Ingredients Worksafe Exposure Limits Chemical Entity TWA, mg/m³ STEL, mg/m³ CAS No Proportion, % Permethrin 40:60 52645-53-1 50 not set not set Non hazardous liquid hydrocarbon 38.5 not set not set secret Other non hazardous ingredients to 100 not set secret not set

This is a commercial product whose exact ratio of components may vary. Trace quantities of impurities are also likely.

II HEALTH HAZARD DATA

Health Effects:

No specific data is available for the product for chronic exposure symptoms. The ingredients are not listed as carcinogenic in Worksafe's document "Exposure Standards for Atmospheric Contaminants in the Occupational Environment" (May 1995).

Acute Effects:

Swallowed: Data suggests that this product is harmful if swallowed.

<u>Eye:</u> This product is irritating to the eyes. It will cause discomfort such as stinging pain, watering and redness of the eyes. Effects may last after exposure has ceased, and in severe exposure, long lasting or even permanent effects such as corneal damage can occur.

<u>Skin:</u> This product is irritating to skin. It is likely to cause discomfort and effects such as moderate to severe itchiness, blistering and skin reddening.

Inhalation: Data suggests that this product should present no significant problems to typical persons in normal use.

 LD_{50} Oral (Rat) = 430-4000mg/kg LD_{50} Oral (Mouse) = 540-2690mg/kg

 LD_{50} Dermal (Rat) = >2500mg/kg

Issued by: Farmoz Pty Ltd Product: Farmoz Permex EC Residual Insecticide Phone: (02)9363 3611 Page 1 of 3 Issued: September, 1999

MATERIAL SAFETY DATA SHEET

First Aid:

Ipecac Syrup APF should be available in the area where product is used, or in a nearby unlocked medicine cabinet. Eyebaths or eyewash stations and safety deluge showers should be provided where this product is being used. If poisoning occurs, contact a Doctor or Poisons Information Centre. Phone 13 1126 from anywhere in Australia. If swallowed, and if more than 15 minutes from a hospital, induce vomiting, preferably using Ipecac Syrup APF. Eyes: If this product comes into contact with eyes, hold open and wash with running water for at least 15 minutes. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. Seek medical attention.

<u>Skin:</u> If product gets on skin, immediately remove contaminated clothing and wash skin with soap and water for at least 15 minutes. If irritation persists, seek medical attention.

<u>Inhalation:</u> No first aid measures normally required. However, if vapours or mists have been inhaled, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.

Advice to Doctor: Treat symptomatically. Note the nature of this product.

III PRECAUTIONS FOR USE

Risk Phrases are: R40/22, R36/38. Harmful: possible risk of irreversible effects if swallowed. Irritating to eyes and skin.

Exposure Standards:

A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by NOHSC Australia for any of the major ingredients in this product. There is a blanket limit of 10mg/m^3 for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use. The ADI (Acceptable Daily Intake) for Permethrin is set at 0.05 mg/kg/day. The corresponding NOEL (No-observable-effect-level) is set at 5 mg/kg/day. Values taken from Australian ADI List, May 1998.

Engineering Controls:

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

Personal Protection:

<u>Respiratory Protection:</u> It is usually safe to not use a dust mask or respirator protection on account of this product. However, if the product is being used in dusty or confined conditions, use of a mask or respirator may be preferred. For help in selecting suitable equipment, consult AS/NZS 1715.

<u>Protective Gloves:</u> Impermeable protective gloves should be worn when you are using this product. Failure to do so will lead to irritation of the skin. For help in selecting suitable equipment, consult AS 2161.

Eye Protection: Protective eyewear should be worn when using this product. Eye contact may prove painful and dangerous and should be avoided. Consult AS1336 and AS/NZS 1337 for advice on Industrial Eye Protection. Clothing: Clean overalls or protective clothing should be worn, preferably with an apron. Consult AS2919 for advice on Industrial Clothing.

<u>Safety Boots:</u> Wearing safety boots in industrial situations is advisory. Consult AS/NZS2210 for advice on Occupational Protective Footwear.

Always wash hands before smoking, eating or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

IV SAFE HANDLING INFORMATION

Safety Phrases are: S20, S29, S24/25. When using, do not eat or drink. Do not empty into drains. Avoid contact with skin and eyes.

Storage & Transport

No special storage and transport requirements. This product has no UN classification. This product is a S6 Poison. Observe all relevant regulations regarding sale, transport and storage of this class of product. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure that the product does not come into contact with substances listed under "Materials to avoid" below.

Issued by: Farmoz Pty Ltd Product: Farmoz Permex EC Residual Insecticide Phone: (02)9363 3611 Page 2 of 3 Issued: September, 1999

MATERIAL SAFETY DATA SHEET

Spills & Disposals

In the event of a major spill, prevent spillage from entering drains or water courses. Evacuate the spill area and deny entry to unnecessary and unprotected personnel. Immediately call the Fire Brigade. Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered. Thoroughly launder protective clothing before storage or re-use. See above under Personal Protection regarding Australian Standards relating to personal protective equipment. Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Full details regarding disposal of used containers, spillage and unused material may be found on the label. If there is any conflict between this MSDS and the label, instructions on the label prevail. Dispose of only in accord with all regulations. Advise laundry of nature of contamination when sending contaminated clothing to laundry.

Fire & Explosion Hazard

There is a slight risk of an explosion from this product if it is involved in a fire.

Flashpoint: Not flammable.

Flammability limits: Not applicable. This product is not flammable.

Extinguishing Media: carbon dioxide, dry chemical, foam, water fog.

Special Fire Fighting procedures: If a significant quantity of this product is involved in a fire, call the fire brigade. Immediately evacuate the area of unnecessary personnel. When fighting fires involving significant quantities of this product, wear safety boots, non-flammable overalls, gloves, hat, goggles and respirator. All skin areas should be covered.

<u>Unusual Fire & Explosion Hazards:</u> Fire decomposition products from this product may form toxic mixtures in confined spaces. Vapours from this product are heavier than air and may accumulate in sumps, pits and other low-lying spaces, forming potentially explosive mixtures. They may also flash back considerable distances.

Stability: This product is unlikely to spontaneously decompose.

Polymerisation: This product is unlikely to spontaneously polymerise.

Decomposition Products: Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke. Water.

Materials to avoid: strong oxidising agents.

V OTHER INFORMATION

This MSDS is prepared in accord with the Worksafe Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets", 1994.

Contact Points:

Call Farmoz on (02)9363 3611 Fax: (02)9363 5977

Ask for Russel Brown, Technical Manager.

Police and Fire Brigade: Dial 000

If ineffective: Dial Poisons Information Centre

(13 1126 from anywhere in Australia)

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Please read all labels carefully before using product.

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Issued by: Farmoz Pty Ltd Product: Farmoz Permex EC Residual Insecticide Phone: (02)9363 3611 Page 3 of 3 Issued: September, 1999