



MATERIAL SAFETY DATA SHEET

CUSTOM CHEMICALS INTERNATIONAL

Product: INSKILL

Date of Issue: MARCH 2010

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SECTION 1 – STATEMENT OF CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER: Custom Chemicals international Pty Ltd
ADDRESS: 103-107 Potassium Street, Narangba 4504 Queensland Australia
Trade Name: "INSKILL" READY TO USE NON-RESIDUAL INSECTICIDE
TELEPHONE: +617 3204 8300 **FAX:** +617 3204 8311
AH EMERGENCY TELEPHONE: 13 1126 in Australia **ABN:** 73 050 537 674
Substance: Water based **Product Use:** Insecticide
Creation Date: March 2010 **Revision Date:** March 2015
Product Code: **APVMA Approval No.** 49374

SECTION 2 – HAZARDS IDENTIFICATION

- This product is **NOT classified as HAZARDOUS** according to criteria of the National Occupational Health and Safety Commission Australia.
- This product is **NOT classified as Dangerous Goods** according to the Australian Dangerous Goods (ADG) Code.
- This product is **NOT classified as a Scheduled Poison** according to the SUSDP.

Approved Criteria

Classification	Not hazardous	ADG Classification	none allocated
UN Number	none allocated	ADG Subsidiary Risk	none allocated
Shipping Name	none allocated	Packing Group	none allocated
Hazchem Code	none allocated		
SUSDP Classification	none allocated		

EMERGENCY OVERVIEW

Colour	colourless	Odour	Pyrethrins
Physical Description	Liquid	Viscosity	Non-viscous liquid
Major Health Hazards	None known		

SECTION 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication "List of Designated Hazardous Substances" or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication "Approved Criteria for Classifying Hazardous Substances".

Ingredients:	CAS	Proportion:	Exposure	Exposure
	Number:		Standards	Standards
			TWA	STEL
Pyrethrin I	121-21-1	<10% w/w	not set	not set
Pyrethrin II	121-29-9	<10% w/w	not set	not set
Piperonyl Butoxide	51-03-6	<10% w/w	not set	not set
Ingredients determined to be non-hazardous	Various	< 10% w/w	not set	not set
Water	7732-18-5	> 60% w/w	not set	not set

The **TWA** exposure value is the Time Weighted Average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The **STEL** (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

SECTION 4 – FIRST AID MEASURES

Scheduled Poisons Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons. (Phone Australia 131126 or New Zealand 03 474 7000).

First Aid Facilities Normal washroom facilities.



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Skin contact	Wash skin with plenty of water. Remove contaminated clothing and wash before re-use. Seek medical advice (e.g. doctor) if irritation, burning or redness develops.
Eye contact	Immediately irrigate with copious quantities of water for at least 20 minutes. Eyelids to be held open. Seek medical advice (e.g. ophthalmologist).
Ingestion	Do NOT induce vomiting. Do NOT attempt to give anything by mouth to an unconscious person. Rinse mouth thoroughly with water immediately. Give water to drink. If vomiting occurs, give further water to achieve effective dilution. Seek medical advice (e.g. doctor).
Inhalation	Remove victim to fresh air away from exposure - avoid becoming a casualty. Seek medical advice (e.g. doctor).
Advice to Doctor	Treat symptomatically. All treatments should be based on observed signs and symptoms of distress of the patient. Poisons Information Centre in each Australian State capital city or in Christchurch, New Zealand can provide additional assistance for scheduled poisons.
Aggravated Medical Conditions	None known.

SECTION 5 – FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Water based. Not combustible. However if involved in a fire will emit toxic fumes.
Extinguishing Media	Use carbon dioxide (CO ₂) fire extinguisher, water fog or fine water spray.
Fire Fighting	Keep containers exposed to extreme heat cool with water spray. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of combustion or decomposition. Evacuate area - move upwind of fire.
Flash Point	Not combustible

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency Procedures	No HAZCHEM code.
Occupational Release	Minor spills do not normally need any special clean-up measures. In the event of a major spill, prevent spillage from entering drains or water courses. For large spills, or tank rupture, stop leak if safe to do so. Wear appropriate protective equipment as in section 8 below to prevent skin and eye contamination. Spilt material may result in a slip hazard and should be absorbed into dry, inert material (e.g. sand, earth or vermiculite), which then can be put into appropriately labelled drums for disposal by an approved agent according to local conditions. Residual deposits will remain slippery. Wash area down with excess water. If contamination of sewers or waterways has occurred advise the local emergency services. In the event of a large spillage notify the local environment protection authority or emergency services.

SECTION 7 – HANDLING AND STORAGE

Handling	Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with water after handling.
Storage	Store in a cool, dry, place with good ventilation. Avoid storing in aluminium and light alloy containers. Store away from incompatible materials (Section 10). Keep containers closed at all times – check regularly for leaks.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION



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Exposure Limits

National Occupational Exposure Limits, as published by National Occupational Health & Safety Commission:

Time-weighted Average (TWA): None established for specific product.

See **SECTION 3** for Exposure Limits of individual ingredients.

Short Term Exposure Limit (STEL): None established for specific product.

See **SECTION 3** for Exposure Limits of individual ingredients.

Biological Limit Value

None established for product.

Engineering Controls

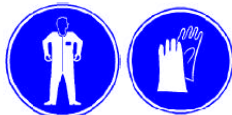
Ensure ventilation is adequate to maintain air concentrations below exposure standards. Avoid generating and inhaling mists of the product. Use only in a well-ventilated area. Ensure airflow, where this product is used, is directed away from the operators.

Personal Protective Equipment

This product is not classified as hazardous according to the criteria of Worksafe Australia. Use good occupational work practice. The use of protective clothing and equipment depends upon the degree and nature of exposure. Final choice of appropriate protection will vary according to individual circumstances i.e. methods of handling or engineering controls and according to risk assessments undertaken. The following protective equipment should be available;

Eye Protection

The use of safety glasses with side shield protection, goggles or face shield is recommended to handle in quantity, cleaning up spills, decanting, etc. Contact lenses pose a special hazard ; soft lenses may absorb irritants and all lenses concentrate them.

Skin Protection

Overalls, work boots and elbow length gloves are recommended for handling the concentrated product (as per AS/NZS 2161, or as recommended by supplier) to handle in quantity, cleaning up spills, decanting, etc.

Protective Material Types

Material suitable for detergent contact – Butyl rubber, Natural Latex, Neoprene, PVC, and Nitrile.

Respirator

Where high contaminant spray mist or vapour levels exist, ie, approaching the exposure limit, the following additional equipment is required: For short elevated exposures, eg, spillages:- Appropriate organic vapour cartridge respirator as per the requirements of AS/NZS 1715 and AS/NZS 1716 (Respiratory protective devices). For prolonged exposure and confined spaces:- full face air supplied or self contained breathing apparatus (if vapour levels exceed the Exposure Limit by more than ten times, air supplied apparatus should be used).

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	liquid	Colour	clear
Odour	pyrethrins odour	Specific Gravity	1.0 @ 25 °C
Boiling Point	Approximately 100 °C.	Freezing Point	Approximately 0 °C
Vapour Pressure	Not available	Vapour Density	Not available.
Flash Point	Not flammable	Flammable Limits	None
Water Solubility	Miscible in all proportions.	pH	6.0 – 7.0 neat
Volatile Organic Compounds (VOC)	0 % v/v.	Coefficient of Water/Oil Distribution	Not available.
Viscosity	Not available.	Odour Threshold	Not available.
Evaporation Rate	Not available.	Per Cent Volatile	Ca 85 % v/v.

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability	Stable at normal temperatures and pressure.
Conditions to Avoid	Avoid contact with heat or heat sources. Avoid direct sunlight.
Incompatible Materials	Reducing agents, oxidizing agents.



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Hazardous

Decomposition Products

Product can decompose on combustion to form Carbon Monoxide, Carbon Dioxide, and other possibly toxic gases and vapours.

Hazardous Reactions

None known.

SECTION 11 – TOXICOLOGICAL INFORMATION

PRODUCT MIXTURE INFORMATION

Local Effects

Mild toxicity: eye, skin, inhalation and ingestion.

Target Organs

Central nervous system, liver.

POTENTIAL HEALTH EFFECTS

Ingestion

short term exposure

Low toxicity. Large amounts may cause nausea, vomiting, headache and other CNS disturbances.

long term exposure

No information available.

Skin contact

short term exposure

Mild irritant. Skin contact can cause redness, itching, irritation, if extended contact with concentrated product.

long term exposure

Prolonged and repeated skin contact with undiluted solutions may induce eczematoid dermatitis.

Eye contact

short term exposure

Eye contact will cause stinging, blurring, tearing, pain.

long term exposure

No information available.

Inhalation

short term exposure

Inhalation of mists or aerosols can produce mucous membrane and respiratory irritation.

long term exposure

No information available.

Carcinogen Status

NOHSC

No significant ingredient is classified as carcinogenic by NOHSC.

NTP

No significant ingredient is classified as carcinogenic by NTP.

IARC

No significant ingredient is classified as carcinogenic by IARC.

Medical conditions aggravated by exposure

No information available.

CLASSIFICATION OF INDIVIDUAL INGREDIENTS

NOTE : This information relates to each individual ingredient, when evaluated as pure undiluted chemical. See SECTION 3 for actual proportions of ingredients present in this product.

Ingredients

Pyrethrins I & II

Piperonyl butoxide

R-Phrases.

R20/21/22

R23 R24 R25 R40

100% PYRETHRINS

Irritation Data

Inhaling high levels of pyrethrum may bring about asthmatic breathing, sneezing, nasal stuffiness, headache, nausea, in-coordination, tremors, convulsions, facial flushing and swelling, and burning and itching sensations.

Toxicity Data

The most severe poisonings have been reported in infants, who are not able to efficiently break down pyrethrum. The lowest lethal oral dose of pyrethrum is 750 mg/kg for children and 1,000 mg/kg for adults. Oral LD50 values of pyrethrins in rats range from 200 mg/kg to greater than 2,600 mg/kg. Some of this variability is due to the variety of constituents in the formulation. Mice have a pyrethrum oral LD50 of 370 mg/kg.

Local Effects

Animals fed large doses of pyrethrins may experience liver damage. Rats fed pyrethrin at high levels for two years showed no significant effect on survival, but slight, definite damage to the livers was observed. Inhalation of high doses of pyrethrum for 30 minutes each day for 31 days caused slight lung irritation in rats and dogs.

Target Organs

In mammals, tissue storage has not been recorded. At high doses, pyrethrum can be damaging to the central nervous system and the immune system. When the immune system is attacked by pyrethrum, allergies can be worsened.



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Acute Toxicity Level	Absorption of pyrethrum through the stomach and intestines and through the skin is slow. However, humans can absorb pyrethrum more quickly through the lungs during respiration. Response appears to depend on the pyrethrum compound used. Overall, pyrethrins and pyrethroids are of low chronic toxicity to humans and the most common problems in humans have resulted from the allergenic properties of pyrethrum.
Mutagenic Data	The one rabbit reproduction study performed showed no teratogenic effect of pyrethrins on development of the offspring.
Reproductive Effects	Rabbits that received pyrethrins orally at high doses during the sensitive period of pregnancy had normal litters. Overall, pyrethrins appear to have low reproductive toxicity.
100% PIPERONYL BUTOXIDE	
Irritation Data	Acute dermal LD 50: 1880mg/kg (rabbits).
Toxicity Data	Acute oral LD 50: >7500mg/kg (rats).
Local Effects	Harmful if swallowed, inhaled or absorbed through the skin. Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant).
Target Organs	The substance may be toxic to blood, kidneys, lungs, liver, skin, central nervous system (CNS).
Mutagenic Data	No information.
Reproductive Effects	Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].

SECTION 12 – ECOLOGICAL INFORMATION

Fish toxicity	Pyrethrin is toxic to aquatic life, such as bluegill and lake trout.
Algae toxicity	None available for specific product.
Invertebrates toxicity	Pyrethrins are slightly toxic to bird species, such as mallards. These compounds are toxic to bees also.
Toxicity to Bacteria	None available for specific product.
OECD Biological degradation	Individual components stated to be biodegradable. Natural pyrethrins are highly fat soluble, but are easily degraded and thus do not accumulate in the body. Because pyrethrin-I and pyrethrin-II have multiple sites in their structures that can be readily attacked in biological systems, it is unlikely that they will concentrate in the food chain. Pyrethrins are inactivated and decomposed by exposure to light and air.
General	Product miscible in all proportions with water. AS WITH ANY CHEMICAL PRODUCT, DO NOT DISCHARGE BULK QUANTITIES INTO DRAINS, WATERWAYS, SEWER OR ENVIRONMENT. Inform local authorities if this occurs.

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal	To dispose of quantities of undiluted product, refer to State Land Waste Management Authority. Transfer product residues to a labelled, sealed container for disposal or recovery. Waste disposal must be by an accredited contractor. As with any chemical, do not put down the drain in quantity. The small quantities contained in wash solutions (when used as directed) can generally be handled by conventional sewage systems, septs, and grey water systems. For larger scale use, eg. Commercial laundry operations, a recycled water system is often recommended, or Trade Waste License obtained for disposal to sewer.
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SECTION 14 – TRANSPORT INFORMATION

UN Number	none allocated	ADG Classification	none allocated
Shipping Name	none allocated	ADG Subsidiary Risk	none allocated
Hazchem Code	none allocated	Packing Group	none allocated
Packaging Method	none allocated	Special Provisions	none allocated
Segregation	none allocated		



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SECTION 15 – REGULATORY INFORMATION

AICS All ingredients present on AICS.

SECTION 16 – OTHER INFORMATION

Labeling Details

HAZARD Not hazardous
RISK PHRASES None allocated
SAFETY PHRASES None allocated
SUSDP None allocated
ADG Code None allocated

Acronyms

SUSDP Standard for the Uniform Scheduling of Drugs and Poisons.
ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail.
CAS Number Chemical Abstracts Service Registry Number.
UN Number United Nations Number.
R-Phrases Risk Phrases.
HAZCHEM An emergency action code of numbers and letters which gives information to emergency services.

NOHSC

National Occupational Health and Safety Commission.

NTP National Toxicology Program (USA).

IARC International Agency for Research on Cancer.

AICS Australian Inventory of Chemical Substances.

TWA Time Weighted Average

STEL Short Term Exposure Limit

Literature References

List of Designated Hazardous Substances [NOHSC:10005(1999)]
 Australian Code For The Transport Of Dangerous Goods By Road And Rail – Sixth Edition.
 Standard for the Uniform Scheduling of Drugs and Poisons.
 National Code of Practice for the Preparation of Material Safety Data Sheets 2nd Edition [NOHSC:2011(2003)]
 Approved Criteria for Classifying Hazardous Substances [NOHSC:1008(1999)]
 Material Safety Data Sheets – individual raw materials – Suppliers.
 HSIS – Hazardous Substance Information System – National Worksafe Data Base.
 New Issue to standard : 2nd Edition [NOHSC:2011(2003)].

Revision Information

Note Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

Contact Point Regulatory Affairs Manager. **Telephone** (07) 3204 8300

Issue Date MARCH 2010 **Supersedes Issue Date** AUG 2007

This MSDS summarizes at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since the supplier cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this supplier.