

## SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product (material) name: Pharma-Chemical Piperazine Solution

Other names: Not Applicable

Recommended use: For the removal of worms from poultry, pigs, and caged birds.

Supplier Details: Pharmachem  
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Eagle Farm QLD 4009  
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Contact Person: Mr Gray Boston  
Emergency Telephone: (07) 3630 1654

## SECTION 2 HAZARDS IDENTIFICATION

This product is classified as ***not hazardous*** according to the classification criteria of NOHSC:1008(2004), Approved Criteria For Classifying Hazardous Substances and the National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011(2003)]. It is not classified as dangerous goods under the Australian Dangerous Goods Code.

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	Cas No.	Proportion
Piperazine Citrate	144-29-6	450 g/L
Inert ingredients	Proprietary	QS 1L

## SECTION 4 FIRST AID MEASURES

This product has been registered by the APVMA and assessed by the Office of Chemical Safety (OCS) of the Commonwealth Department of Health and Aging and it is considered that First Aid directions are not required *FAISD Handbook*.

However, it is possible that if eye contact occurs some eye irritation may be experienced. Eyes should be flooded with water for 15 minutes in the event of eye contact causing irritation.

## **SECTION 5 FIRE FIGHTING MEASURES**

Suitable extinguishing media: Foam, dry chemical, carbon dioxide  
Hazards from combustion products : Noxious or toxic vapours (carbon and nitrogen oxides) may be released in a fire situation  
Special protective precautions and equipment for fire fighters: Fire fighters should wear self contained breathing apparatus.

## **SECTION 6 ACCIDENTAL RELEASE MEASURES**

Emergency procedures: Slippery when spilt. Contain spilled liquid with impervious material or inert absorbent material. Avoid accidents, clean up immediately. Wash area down with excess water.  
Methods and materials for containment and clean up: Collect absorbed material in drums for disposal in an approved local authority landfill. Wash down contaminated area with excess water after collecting absorbed material.

## **SECTION 7 HANDLING AND STORAGE**

Precautions for safe handling: Spilled product will form a slippery surface. Clean up any spillages immediately with absorbent material and wash with excess water.  
Conditions for safe storage, including any incompatibilities: Store below 30°C (Room Temperature) in the original container out of direct sunlight.

## **SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

National exposure standards: No values set for this material  
Biological limit values: No values set for this material  
Engineering controls: Natural ventilation only required  
Personal protective equipment: No specific personal protective equipment required.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow, transparent free flowing liquid.

## SECTION 10 STABILITY AND REACTIVITY

Chemical stability: Stable under normal conditions of use.

Hazardous decomposition products: Thermal decomposition or burning may produce toxic oxides of nitrogen and carbon.

## SECTION 11 TOXICOLOGICAL INFORMATION

Health effects from the likely routes of exposure

Toxicity To Mammals (Piperazine Citrate):

Acute oral LD <sub>50</sub>	Rats	11200 mg/kg
	Mice	13200 mg/kg
Acute dermal LD <sub>50</sub>	Rabbit	4000 mg/kg

## SECTION 12 ECOLOGICAL INFORMATION

From piperazine salts, the same ionic species are formed in the environment as from piperazine itself, independent to the originally used compound. Therefore, in the environmental exposure assessment the emissions from the formulation stage of the salts are treated as formulation of piperazine.

Ecotoxicity

Toxicity to Aquatic Species (Piperazine):

Guppy ( <i>Poecilia reticulata</i> ):	LC <sub>50</sub>	>1 800 mg/L
<i>Daphnia magna</i> :	EC <sub>50</sub> (48 hours)	21 mg/L

Persistence and degradability: Not readily biodegradable

Bioaccumulative potential: Bioaccumulation is not considered to be of major importance for piperazine.

## SECTION 13 DISPOSAL CONSIDERATIONS

Disposal methods and containers: Do not burn unused product or containers. Dispose of unused product and containers in accordance with local authority requirements.

Special precautions for landfill: No special precautions required for landfill

#### **SECTION 14 TRANSPORT INFORMATION**

This material is not classified as Dangerous Goods under the Australian Dangerous Goods Code. No special precautions are required for transport of this material.

#### **SECTION 15 REGULATORY INFORMATION**

This product has been registered by the Australian Pesticides and Veterinary Medicines Authority (APVMA). In granting registration to any product, the APVMA has exercised its legislative responsibility to ensure that the product is suitably formulated and properly labelled and, when used according to instructions is:

- safe to the host, the user, consumers and the environment;
- efficacious (that is, the product does the job it claims it shall do); and
- not unduly prejudicial to trade.

The APVMA uses the services of a number of Australian and State government agencies as advisers to help with some of these evaluations of applications for registration of agricultural and veterinary chemical products. These include:

- the Office of Chemical Safety (OCS) of the Commonwealth Department of Health and Ageing which:
- evaluates and reports on toxicology and metabolism studies; proposes first aid and safety directions; determines poison schedule classifications; and establishes acceptable daily intakes (ADIs) and acute reference doses (ARfD); and
- evaluates the occupational health and safety aspects of an application and recommends safety directions and occupational controls on use and advises on a Material Safety Data Sheet (MSDS);
- the Commonwealth Department of the Environment and Heritage (DEH) which evaluates environmental data and recommends appropriate use controls and instructions for the product that will protect the environment; and
- State and Territory departments responsible for agricultural and primary industries which evaluate and reports on efficacy and target crop or animal safety data for new agricultural chemicals and new uses of registered products. In some cases the APVMA contracts this work out to other agencies such as universities, the CSIRO or to other experts.

## SECTION 16 OTHER INFORMATION

Date of last revision of the MSDS: January 07

### **CONTACT POINT**

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### References:

1. FAISD Handbook, Handbook of First Aid Instructions, Safety Directions, Warning Statements, and General Safety Precautions for, Agricultural and Veterinary Chemicals, March 2005
2. Approved Criteria For Classifying Hazardous Substances, NOHSC:1008 (2004)
3. National Code of Practice for the Preparation of Material Safety Data Sheets 2<sup>nd</sup> Edition [NOHSC:2011 (2003)]
4. AICS (Australian Inventory of Chemical Substances)
5. APVMA Manual of Requirements and Guidelines for Agricultural Chemicals, October 2005
6. ADI [Acceptable Daily Intake] List, Commonwealth Department of Health & Aged Care, TGA, August 2001
7. The Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) 6<sup>th</sup> Edition
8. Hazardous Substances Information System, Version 1.2.2 (September 2004), Last Updated – November 2005, NOHSC

All information contained in this Material Safety Data Sheet is as accurate and up to date as possible. Since Pharmachem cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Pharmachem will not be responsible for damages of any nature resulting from use of or reliance upon the information. No expressed or implied warranties are given other than those implied as mandatory by Commonwealth State or Territory legislation.