

Section 1 - Identification of The Material and Supplier

Ensystem Australasia Pty Ltd
Unit 3, The Junction Estate
AUBURN, NSW 2144
13 35 36 (all hours)

Ensystem New Zealand Ltd
17C Corinthian Drive
Albany, Auckland 0752
0800 ENSYSTEM (0800 367 978)

Chemical nature: Fipronil based insecticide
Trade Name: **MAGNATHOR™ Magnetic Insecticide with Magthanite®**
Product Code: Australia APVMA: 66106 New Zealand HSR Approval: 100721
Product Use: Insecticide for use as described on the registered product label.
Creation Date: **June, 2014**
This version issued: **February 2017 b** and is valid for 5 years from this date.

Section 2 - Hazards Identification

Statement of Hazardous Nature

This product is classified as: Not classified as hazardous according to the criteria of SWA.

Not a Dangerous Good according to the Australian Dangerous Goods (ADG) Code.

Risk Phrases: None.

Safety Phrases: S61, S25. Avoid release to the environment. Avoid contact with eyes.

SUSMP Classification: None allocated.

ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMSBC criteria.

IATA: Non-Hazardous for Air Transport.

UN Number: None allocated

GHS Signal word: NONE. Not hazardous.

HAZARD STATEMENT:

H401: Toxic to aquatic life.

PREVENTION

P102: Keep out of reach of children.

P262: Do not get in eyes, on skin, or on clothing.

P273: Avoid release to the environment.

RESPONSE

P352: Wash with plenty of soap and water.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P370+P378: Not combustible. Use extinguishing media suited to burning materials.

STORAGE

P410: Protect from sunlight.

P402+P404: Store in a dry place. Store in a closed container.

P403+P235: Store in a well-ventilated place. Keep cool.

DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in plastic bag in the garbage. For larger quantities, if recycling not possible, use a commercial waste disposal service.

Emergency Overview

Physical Description & colour: Dark grey metallic, granular powder.

Odour: Negligible odour.

Major Health Hazards:

No significant risk factors have been found for this product.

™ Trademark of Ensystem, Inc. used under licence by Ensystem Australasia Pty Ltd and Ensystem New Zealand Ltd.

® MAGTHANITE is a trademark of EIGH Energy Investment Group Holding Co. Ltd. and is protected by patents.

SAFETY DATA SHEET

Issued by: Ensystem Australasia Pty Ltd

Phone: 13 35 36 (ALL HOURS)

Poisons Information Centre: 13 11 26 from anywhere in Australia, (0800 764 766 in New Zealand)

Potential Health Effects

Inhalation:

Short term exposure: Available data indicates that this product is not harmful.

Long Term exposure: No data for health effects associated with long term inhalation.

Skin Contact:

Short term exposure: Available data indicates that this product is not harmful. Product is unlikely to cause any discomfort in normal use.

Long Term exposure: No data for health effects associated with long term skin exposure.

Eye Contact:

Short term exposure: This product will be irritating to eyes.

Long Term exposure: No data for health effects associated with long term eye exposure.

Ingestion:

Short term exposure: Significant oral exposure is considered to be unlikely. However, this product may be irritating to mucous membranes, but is unlikely to cause more than transient discomfort.

Long Term exposure: No data for health effects associated with long term ingestion.

Carcinogen Status:

SWA: No significant ingredient is classified as carcinogenic by SWA.

NTP: No significant ingredient is classified as carcinogenic by NTP.

IARC: No significant ingredient is classified as carcinogenic by IARC.

Section 3 - Composition/Information on Ingredients

Ingredients	CAS No	Conc, %	TWA (mg/m ³)	STEL (mg/m ³)
Fipronil	120068-37-3	0.05% (0.5 g/kg)	not set	not set
Myranite		>70	not set	not set
Strontium Ferrite	12023-91-5	<10	not set	not set
Non hazardous food ingredients	various	to 100	not set	not set

This is a commercial product whose exact ratio of components may vary slightly.

The SWA TWA exposure value is the 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 may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated 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

General Information:

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 11 26 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.

Inhalation: First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

Skin Contact: Gently brush away excess particles. Irritation is unlikely. However, if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes or until product is removed.

Eye Contact: Quickly and gently brush particles from eyes. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 15 minutes or until the product is removed. Obtain medical advice if irritation becomes painful or lasts more than a few minutes. Take special care if exposed person is wearing contact lenses.

Ingestion: If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or a doctor.

SAFETY DATA SHEET

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: The major hazard in fires is usually inhalation of heated and toxic or oxygen deficient (or both), fire gases. There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.

Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials. Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog.

Fire Fighting: If a significant quantity of this product is involved in a fire, call the fire brigade.

Flash point: Does not burn.

Upper Flammability Limit: Does not burn.

Lower Flammability Limit: Does not burn.

Autoignition temperature: Not applicable - does not burn.

Flammability Class: Does not burn.

Section 6 - Accidental Release Measures

Accidental release: This product is sold in small packages, and the accidental release from one of these is not usually a cause for concern. For minor spills, clean up, rinsing to sewer and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling pesticides. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services.

Section 7 - Handling and Storage

Handling: Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. Check Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace. Also, avoid contact or contamination of product with incompatible materials listed in Section 10.

Storage: Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight. Make sure that the product does not come into contact with substances listed under "Incompatibilities" in Section 10. Check packaging - there may be further storage instructions on the label.

Section 8 - Exposure Controls and Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Occupational Protective Clothing: **AS/NZS 4501** set 2008, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

SWA Exposure Limits **TWA (mg/m³)** **STEL (mg/m³)**

Exposure limits have not been established by SWA for any of the significant ingredients in this product.

The ADI for Fipronil is set at 0.0002 mg/kg/day. The corresponding NOEL is set at 0.02 mg/kg/day. ADI means Acceptable Daily Intake; NOEL means No-observable-effect-level. Data from Australian ADI List, June 2013.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

Eye Protection: Wear suitable protective glasses.

Skin Protection: The information at hand indicates that this product is not harmful and that normally no special skin protection is necessary. However, we suggest that you routinely avoid contact with all pesticides and that you wear suitable gloves when skin contact is likely.

Protective Material Types: We suggest that protective clothing be made from the following materials: rubber, PVC.

Respirator: If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask.

SAFETY DATA SHEET

Section 9 - Physical and Chemical Properties:

Physical Description & colour:	Dark grey metallic, granular powder.
Odour:	Negligible odour.
Boiling Point:	Not available.
Freezing/Melting Point:	No specific data.
Volatiles:	None.
Vapour Pressure:	No data.
Vapour Density:	Not applicable.
Specific Gravity:	4.2.
Water Solubility:	Insoluble.
pH:	No data.
Odour Threshold:	No data.
Evaporation Rate:	Not applicable.
Coeff Oil/water distribution:	No data
Viscosity:	Not applicable.
Autoignition temp:	Not applicable - does not burn.

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

Conditions to Avoid: Protect this product from light. Store in the closed original container in a dry, cool, well-ventilated area out of direct sunlight.

Incompatibilities: Strong oxidising agents.

Fire Decomposition: No specific data.

Polymerisation: This product will not undergo polymerisation reactions.

Section 11 - Toxicological Information

Toxicity:	Acute dermal/ oral: low, LD50 >5000 mg/kg bw (Rat)
Acute inhalation:	LC50 (4 hr) >2.04 mg/L (Rat)

Classification of Hazardous Ingredients

Ingredient	Risk Phrases
No ingredient mentioned in the HSIS Database is present in this product at hazardous concentrations. There is no data to hand indicating any particular target organs.	

Section 12 - Ecological Information

Non-toxic to earthworms. Fipronil has low mobility in soil. Toxic to bees, fish and aquatic organisms. Do NOT apply to areas where surface water is present. Do NOT contaminate streams, rivers or waterways with the chemical or used containers. DO NOT place in locations which are accessible to domestic animals, livestock or birds.

In laboratory studies, fipronil has a half-life of 122-128 days in oxygenated sandy loam. In field studies, dissipation half-life on soil surfaces ranged from 0.7 to 1.7 months. Half-life of fipronil applied by soil incorporation ranged from 3 to 7.3 months. Residues remain mainly in the upper 30 cm of soil. Fipronil has low soil mobility - it binds to the soil and has little potential for groundwater contamination.

Fipronil degrades slowly in water and sediment that lack oxygen, with a half-life ranging from 116 to 130 days.

Fipronil is stable to breakdown by water at mildly acidic to neutral pH values.

When exposed to light, fipronil has a half-life of 3.6 hours in water, and 34 days in loamy soil.

Toxic to bees. Toxic to aquatic organisms.

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in plastic bag in the garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

SAFETY DATA SHEET

Section 14 - Transport Information

ADG Code: This product is not classified as a Dangerous Good by ADG, IATA or IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

IATA: Non-Hazardous for Air Transport.

Section 15 - Regulatory Information

AICS: All of the significant ingredients in this formulation are compliant with NICNAS regulations. The following ingredient: Fipronil, is mentioned in the SUSMP.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

If there is any conflict between this SDS and the registered label, instructions on the label prevail.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail (7 th edition)
AICS	Australian Inventory of Chemical Substances
SWA	Safe Work Australia, formerly ASCC and NOHSC
CAS number	Chemical Abstracts Service Registry Number
Hazchem Code	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters
IARC	International Agency for Research on Cancer
NOS	Not otherwise specified
NTP	National Toxicology Program (USA)
R-Phrase	Risk Phrase
SUSMP	Standard for the Uniform Scheduling of Medicines & Poisons
UN Number	United Nations Number

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE.

IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS. OUR RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

SAFETY DATA SHEET