



MATERIAL SAFETY DATA SHEET

F.A.W. PHEROLURE®

SECTION 1. PRODUCT IDENTIFICATION

Product Code:	PFAW
Product Name:	F.A.W. PheroLure®
Chemical contents:	Fall Armyworm Pheromone (Z-11-Hexadecen-1-yl Acetate (17.75%), Z-9-Tetradecen-1-yl Acetate (81.8%) & Z-7-Dodecen-1-yl Acetate (0.45%))
Product description:	This product consists of Fall Armyworm Pheromone (Z-11-Hexadecen-1-yl Acetate (17.75%), Z-9-Tetradecen-1-yl Acetate (81.8%) & Z-7-Dodecen-1-yl Acetate (0.45%)) impregnated in a red rubber septum. This product is intended for use in agricultural crops for the monitoring male Fall Armyworm (<i>Spodoptera frugiperda</i>) in cereal grains.
Chemical family:	Fall Armyworm attractant
Chemical Formula:	C ₁₆ H ₃₀ O ₂ ; C ₁₈ H ₃₄ O ₂ ; C ₁₄ H ₂₆ O ₂
24 Hr Emergency Number:	087 754 9785 (Insects Science)
In case of Poisoning:	Poison Information Centre 082 446 8946 Tygerberg Hospital: 021 931 6129 Poison Emergency Enquiries 021 689 5227

SECTION 2. COMPOSITION / INFORMATION ON ACTIVE INGREDIENTS

Chemical characteristic:	Fall Armyworm Pheromone
Chemical contents:	Z-11-Hexadecen-1-yl Acetate (17.75%), Z-9-Tetradecen-1-yl Acetate (81.8%) & Z-7-Dodecen-1-yl Acetate (0.45%)
C.A.S. Registry Number:	34010-21-4; 16725-53-4 & 14959-86-5
Formulation type:	Liquid impregnated in a rubber septum
Sector:	Attractant
R-Phrase	R20 36/37/38
Symbol:	Xi: Irritant

SECTION 3. HAZARDS IDENTIFICATION

When in the dispenser formulation, the impregnated pheromone represents less of a hazard than the neat pheromone material.

Health Hazards:	Slight
Skin and eyes:	May cause skin and eye irritation.

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Inhalation: Inhalation of volatile oils may cause dizziness.

SECTION 4. FIRST AID MEASURES

When in the dispenser formulation, the impregnated pheromone represents less of a hazard than the neat pheromone material.

First aid in general:	In case of indisposition place the patient in a well-ventilated area and protect the person from hypothermia.
Inhalation exposure:	IN CASE OF SUSPECTED POISONING: Call a physician immediately. Immediately remove to fresh air. If not breathing, start artificial respiration. If breathing is difficult give oxygen. Call a physician.
Dermal exposure:	Remove contaminated clothing and thoroughly wash the affected parts of the body with soap and water. Consult a physician if irritation continues.
Eye exposure:	Rinse eye with clean water for several minutes, occasionally lifting the upper and lower eyelids. Call a physician.
Oral exposure:	Repeatedly administer medicinal charcoal in a large quantity of water. Note: Never give anything by mouth to an unconscious person. Do not induce vomiting. Antidote: No specific antidote is known - Apply symptomatic therapy.

SECTION 5. FIRE FIGHTING MEASURES

When in the dispenser formulation, the impregnated pheromone represents less of a hazard than the neat pheromone material.

Suitable Extinguishing Media:	Extinguishing agent: Powder, foam, carbon dioxide or water spray (<u>do not use</u> direct jet of water)
Special Exposure Hazard:	Combustion products are toxic and/or irritant. Measures have to be taken to prevent the contaminated extinguishing agent from seeping into the ground or from spreading uncontrollably.
Protective Equipment:	Use respirator to protect from fumes.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Do not contaminate water and sewers. Cover up product with absorptive material such as sand, soil, diatomaceous earth, etc. and dispose of in an incinerator approved for chemicals. Collect material in



specially marked, tightly closing containers. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact manufacturer, the dealer or the local representative.

SECTION 7. HANDLING AND STORAGE

Handling:	Avoid contact with skin, eyes and clothing. Avoid inhalation of fog and vapours. Do not eat, drink or smoke while working. In addition to the standard chemical manufacturing practices, like splash proof filling and measuring equipment (including vapour stripping), further personal protection measures may have to be implemented to avoid possible contact with the product.
Storage:	Store the product in closed original containers at temperatures below 4 °C, do not freeze and use within 12 months.
Storage Compatibility:	Store separately from feed, food and stimulants.

SECTION 8. EXPOSURE CONTROLS / PPE

When in the dispenser formulation, the impregnated pheromone represents less of a hazard than the neat pheromone material.

Occupational Toxicity Risk:	Low
Engineering controls:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Keep away from foodstuff, beverages and food. Avoid contact with skin and eyes, remove contaminated clothing immediately
Personal Protective Equipment:	Change working clothes daily, wash before reuse. In cases of heavy exposure, wear a gas mask with filter A. Gloves for hands and goggles for eyes. Heavy duty cotton or synthetic fabric working clothes (e.g. overalls).
Precautionary Measures:	Wash thoroughly (shower, bathe, wash hair). Change clothing. Thoroughly clean protective gear. Thoroughly clean contaminated equipment with soap or soda solution.

SECTION 9. PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Liquid pheromones impregnated in a rubber septum.
Physical state:	Liquid in a rubber septum.
Colour:	Clear to light yellow liquid in a red rubber septum.
Odour:	Mild waxy odour
Boiling point / range:	120 °C
Flash – Point:	> 110 °C



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Density (25°C):	0.842 : 0.896
Solubility Range in Water:	Not soluble
Shelf life:	12 months.
Oxidizing properties:	Not oxidizing.
Corrosiveness:	Non-corrosive.
Storage stability:	Store the product in closed original containers at temperatures below 4 °C, do not freeze and use within 12 months

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability:	Stable under standard conditions.
Hazardous Decomposition Products:	None when handled according to instructions. Carbon dioxide, carbon monoxide.
Conditions to avoid:	Sources of ignition, heat and direct sunlight.
Material to avoid:	Strong oxidising agents.

SECTION 11. TOXICOLOGICAL INFORMATION

When in the dispenser formulation, the impregnated pheromone represents less of a hazard than the neat pheromone material.

Oral Toxicity LD ₅₀ (Rat)	> 5 000 mg/kg
Acute Dermal LD ₅₀ (Rabbit)	> 2000 mg/kg
Inhalation LC ₅₀	> 5 mg/L/4-hour
Skin sensitize:	Not considered a skin sensitizer.
Skin irritation:	Slightly irritating for the skin on prolonged exposure.
Eye irritation	May cause eye irritation on direct contact.

SECTION 12. ECOLOGICAL INFORMATION

The product is not classified as environmentally hazardous: Application through a dispenser is considered not to have an ecological impact.

SECTION 13. DISPOSAL CONSIDERATIONS

Product:	Pay attention to protective clothing and measures. Cover up product with absorptive material such as sand, soil, diatomaceous earth, etc. Collect material in specially marked, tightly closing containers. Clean dirty areas with carbonated or soapy water. Put washing water in containers too, to avoid any contamination of surface and ground water, water supplies and drains. Hose down the area for a prolonged period. Heavily
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contaminated soil layers have to be dug out down to clean soil. Spilled product cannot be used further and must be disposed of. If safe disposal is not possible, contact the manufacturer, the dealer or the local representative and dispose of in an incinerator approved for chemicals.

Damaged containers:

Place original containers in specially marked larger ones.

Empty containers:

Dispose of empty containers in an incinerator approved for chemicals. Check possibilities of recycling large empty containers, drums and barrels.

SECTION 14. TRANSPORT INFORMATION

Special Conditions:	Use unbreakable containers, make sure they cannot fail, and label in accordance with regulations.
Rail/Road RID/ADR:	Not regulated
Sea IMDG-CODE:	Not regulated
Air ICAO:	Not regulated

SECTION 15. REGULATORY INFORMATION

When in the membrane dispenser formulation, the impregnated pheromone represents less of a hazard than the neat pheromone material.

EU – Classification:

Labelling Requirement:	Blue
WHO Toxicity Classification:	III: Product unlikely to present acute hazard in normal use.
Symbol of danger:	Xi: Irritant



R-Phrase	R36/38 Irritating to eyes and skin
S-Phrase	S24/25 Avoid contact with skin and eyes

Hmis rating

Health hazard:	1
Chronic Health Hazard:	0
Flammability:	0
Physical Hazard:	0

Nfpa rating

Health hazard:	1
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Fire hazard: 0
Reactivity: 0

WHMIS classification / GHS classification:

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR), and the MSDS contains all the information required by the HPR.



Signal Word: Warning
Hazard Statements: H315 (Category 2) Skin irritation.
H319 (Category 2A) Eye irritation.

Precautionary Statements: P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes; Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.

US classification: Caution: Eye and skin irritation warning is appropriate.
May cause eye and skin irritation.

US classification and label text:

EPA Exempted from label requirements; CFR 40 152.25(b) if used for monitoring purposes in traps

TSCA inventory item: Yes
SARA listed: No

Canada regulatory information:

DSL: No
NDSL: Yes

SECTION 16. OTHER INFORMATION

It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. We reserve the right to revise material safety data sheets periodically as new information becomes available. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose of any other nature are made hereunder with respect to the information contained herein or the chemical to which the information refers. Insect Science (Pty)

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Ltd assumes no responsibility for any damages, losses, injuries or consequential damages which may result from the use or misuse of this product and the recipient assumes all such risks.

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