



MATERIAL SAFETY DATA SHEET

WHITEFLY INSECTICIDE

Date Issued: May 2011 and is valid for 3 years from this date.

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Revision: 1

Print Date: 3/10/14

1. PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: WHITEFLY INSECTICIDE

SUPPLIER: EFEKTO

PO BOX 652147

BENMORE

2010

TEL No. 011 287 5700

EMERGENCY TELEPHONE NUMBERS:

SPILLAGES: 083 1233 911

Fax: 086 685 3129

POISONINGS:

National Poison Centre 021-9386084 (office hours).

021-9316129 (after hours).

082 446 8946

Use: An insecticide for the control of whitefly on crops as is indicated on the label.

2. HAZARDS IDENTIFICATION

- Flammable.
- Irritating to the skin and eyes.
- Very toxic to aquatic organisms.

Likely routes of exposure:

Skin and eye contact, ingestion and inhalation.

Eye contact:

The product may cause irritation.

Skin contact:

The product is irritating. Short-term dermal exposure may cause itching, burning, tingling, numbness, or a feeling of warmth, but not dermatitis.

Ingestion:

Harmful by ingestion. See point 4 for symptoms.

Inhalation:

Harmful by inhalation. See point 4 for symptoms.

Symbol: N

Risk Phrases: R10, R38, R41; R50/53

UN No: 1993



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3. COMPOSITION/INFORMATION ON INGREDIENTS

Active ingredients:

Chemical Family: Pyrethroid, synergist and pyridine insect growth regulator.

Active ingredients.	CAS No.:	EC No.:
Pyriproxyfen 5.0 %	95737-68-1	429-800-1

Chemical Name: 4-phenoxyphenyl (RS)-2-(2-pyridyloxy)propyl ether.

Chemical Family: Juvenile Hormone Mimics

Chemical Formula: C₂₀H₁₉NO₃

NIOSH/RTECS No.: Mixture

4. FIRST-AID MEASURES

In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation:

Move to fresh air. If symptoms persist, seek medical advice.

Skin:

Remove all contaminated clothing immediately. Wash off with plenty of soap and water. Seek medical advice if irritation develops. Launder clothes before re-use.

Eye:

Rinse immediately and as long as possible with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation persists.

Ingestion:

If swallowed, give copious amounts of water to drink.

Advice to physician:

There is no antidote. Symptomatic treatment is advised.

5. FIRE-FIGHTING MEASURES

Fire and explosion hazard:

Product is flammable.

Extinguishing media: Dry chemical powder, carbon dioxide.

Unsuitable extinguishing media: None known

Special exposure hazards: None known

Hazardous decomposition: Emits toxic and corrosive fumes under fire conditions (carbon

Combustion products: Carbon monoxide (CO) and nitrous gases (NO_x)

Protective equipment:

Wear self contained breathing apparatus. Wear suitable protective clothing and eye / face protection.

Other information:



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Water used to extinguish a fire should not be allowed to enter the drainage system or water courses.

6. ACCIDENTAL RELEASE MEASURES

Environmental precautions:

When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations.

Personal precautions:

Avoid contact with skin and eye. For personal protection see Section 8.

Environmental precautions:

Do not allow to escape into sewage system or water courses.

Methods for cleaning up:

In case of spill (liquid), soak it up immediately with a suitable absorbent, such as sawdust or granular absorbent clay. Sweep up and dispose as waste following local regulations.

7. HANDLING AND STORAGE

Handling:

Avoid contact with eyes and skin, and inhalation of fumes. Use with adequate ventilation. Wash hands before eating, drinking, chewing gum, smoking or using the toilet. Operators should change and wash clothing daily. Remove clothing immediately if the insecticide gets inside. Then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Do not apply directly to areas where surface water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage:

Keep away from sources of ignition – No smoking

Keep under lock and key and out of reach of unauthorised persons, children and animals. Store in its original labelled container in isolated, dry, cool and well-ventilated area. Not to be stored next to foodstuffs and water supplies. Local regulations should be complied with.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

No exposure limits have been established for this material. The following exposure limit(s) apply for:

Xylene

OES-TWA 441.000mg / m³ can be absorbed through skin

OES-STEL 662.000mg / m³ can be absorbed through skin

Engineering control measures:

It is essential to provide adequate ventilation. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire and other applicable regulations. If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

PERSONAL PROTECTIVE EQUIPMENT:

Respirator:



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An approved respirator suitable for protection from dusts and mists of pesticides is required. Limitations of respirator use specified by the approving agency and the manufacturer must be observed.

Clothing:

Employee must wear appropriate protective (impervious) clothing and equipment to prevent skin contact with the substance.

Gloves:

Employee must wear appropriate synthetic protective gloves to prevent contact with this substance.

Eye protection:

The use of safety goggles is recommended.

Emergency eye wash: Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid.
Colour:	Pale yellow to brown.
Odour:	Faint characteristic odour.
Flammability:	Not flammable.
Explosive properties:	Not explosive.
Flash point:	27 °C
Boiling point/range:	138 – 144 °C (Xylene)
pH:	3-7 [1% Dilution]
Density:	0,90-0.92 g/ml at 20 °C
Solubility in water:	Soluble.
Partition coefficient n-octanol/water:	Log Pow: 5.37

10. STABILITY AND REACTIVITY

Storage stability:

Stable for up to 2 years under normal warehouse conditions.

Incompatibility:

This product is ready to use. Do not physically mix directly with other herbicides or pesticides.

Thermal decomposition:

Avoid high temperature. Toxic oxides of carbon are produced when the product decomposes on heating.

11. TOXICOLOGICAL INFORMATION

Data for Pyriproxyfen 10% Emulsifiable concentrate.

Acute oral LD₅₀: male rat: 8100 mg / kg

female rat : 5700 mg / kg

Acute Dermal LD₅₀: 2000 mg/kg of body weight.

Inhalation LC₅₀- rat (4 hours): > 5.12 mg / L

Skin: Irritating to skin.



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Eye:	Irritating to eye.
Sensitization:	Not sensitizing.
Carcinogenicity:	Not carcinogenic.
Teratogenicity:	Animal studies did not detect any teratogenic effects.
Mutagenicity:	Animal studies did not detect any mutagenic activity.

12. ECOLOGICAL INFORMATION

Birds LD₅₀:

Mallard duck: >2,000 mg/kg.

Bobwhite quail: >2000 mg/kg.

Fish LC₅₀:

Bluegill Sunfish 96-hour: >270 µg/L

Rainbow Trout 96-hour: >325 µg/L

Daphnia LC₅₀ 48-h: 0.4 mg/L

Algae EC₅₀:

Selenastrum capricornutum: 0.064 mg/l

Bees LD₅₀: 0,1 mg ai/bee.

Earthworms (LC₅₀) Eisenia foetida: Acute 14 day LC₅₀ >500 mg/kg soil.

Degradation Abiotic:

Stable in water. Immobile in Soil.

Degradation Biotic:

Not readily biodegradable (OECD 301C)

Bioaccumulation:

Log Pow: 5.37

Bio concentration factor (BCF): approx. 1500;

Depuration: rapid t_{1/2} = approx. 1 day)

13. DISPOSAL CONSIDERATIONS

Pesticide disposal:

Contaminated absorbents, surplus product, etc., should be burned in a high- temperature incinerator (> 1000 °C) or buried in approved landfill. Before disposal of the resultant waste, the material must be analyzed to ensure that the active ingredient has been degraded to a safe level. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

Package product wastes:

Emptied containers retain vapours and product residues. Observe all labelled safeguards until container is destroyed. Combustible containers should be disposed of in pesticide incinerators. Non-combustible containers must first be triple rinsed with water, punctured and transported to a scrap metal facility for disposal.



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14. TRANSPORT INFORMATION

UN NUMBER: 1993

ADR

Proper Shipping Name: Flammable liquid, n.o.s. (Contains Xylene)

Classification Code: F1

Class 3

Label: 3

Hazard Identification No. 30

IMO/IMDG code

Proper Shipping Name: Flammable liquid, n.o.s. (Contains Xylene)

Class 3

Label: 3

Packaging group III

IATA

Class 3

Packing group III

Proper Shipping Name: Flammable liquid, n.o.s. (Contains Xylene)

Tremcard No.: 30GF1-III

15. REGULATORY INFORMATION

Symbols: N-Dangerous for the environment; Xi - Irritant . F-Flammable

Risk phrase(s):

R10 Flammable

R38 Irritating to skin

R41 Risk of serious damage to eyes.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrase(s):

S16 Keep away from sources of ignition – No smoking

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S61 Avoid release to the environment, refer to special instructions / Safety Data Sheets.

National Legislation:

In accordance with the South African National Road Traffic Act, 1996 (Act 93 of 1996), the Fire Brigade Act, 1987 (Act 99 of 1987) and the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

16. OTHER INFORMATION

Compiled by: Danie Fourie



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Regulatory Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. This information applies to the PRODUCT AS SUCH. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

It is the responsibility of persons in receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations(s) containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.

REFERENCES

- Philagro MSDS.
- The Pesticide Manual; Thirteenth Edition; Editor Clive Tomlin; Crop Protection Publications, 2003.
- ADR 2011, Part 3.
- IMDG Code, 2005 Edition, Vol. 2.
- IATA Dangerous goods regulations, Effective 1 January 2011

END OF MSDS.