



SAFETY DATA SHEET

SUBJECT: APHICIDE PLUS
PROTECTOR
EFFECTIVE DATE: JULY 2013
REVISION DATE: MAY 2014
REVISION NO: 2
PAGE : 1 of 4
PRODUCT CODE: -

1. PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER: **EFEKTO**
PO BOX 652147
BENMORE
2010
011 287 5700

EMERGENCY TELEPHONE NUMBERS:

SPILLAGES: **083 1233 911**

Fax: **086 520 8261**

POISONINGS:

Tygerberg Hospital National Poison Centre

021-9316129 (all hours)

Griffon Poison Centre 082 446 8946

Trade Name: EFEKTO APHICIDE PLUS

Use A systemic, suspension concentrate for use in the home garden for the control of sucking insects, mole crickets and ants.

2. HAZARD IDENTIFICATION

Hazardous components: Imidacloprid

EEC classification: Xn-Harmful.

R Phrases: R22, R52

Toxicity class:

WHO (a.i.) II; EPA II (formulation)

ADI 0.06 mg/kg

NOEL 330 mg/kg diet daily (rats) – 52 weeks

Main Hazards:

Harmful to aquatic organisms.

Harmful if swallowed, inhaled or absorbed through skin.

Skin contact:

Non irritating.

Eye contact:

Non irritating.

Fire and explosion hazard:

None.

Chemical Hazard:

None

Carcinogenicity/ Mutagenicity/ Reproductive /Teratogenicity

/Neurotoxicity:

See section 11.

3. COMPOSITION /INFORMATION ON INGREDIENTS

Active ingredient: Imidacloprid 20 g/l
Chemical Name: 1-(6-chloro-3-pyridylmethyl)-N-nitroimidazolidin-2-ylideneamine, 1-[(6-chloro-3-pyridinyl)methyl]-N-nitro-2-imidazolidinimine
CAS No.: 138261-41-3
Chemical Family: Neonicotinoid
Chemical Formula: C₉H₁₀ClN₅O₂ (Mol. wt.: 255.7)
Use: Insecticide (systemic)
UN No.: None-not regulated

4. FIRST AID MEASURES

Signs of Poisoning: Although no account of human poisoning was found in the literature, signs and symptoms of poisoning would be expected to be similar to those of nicotinic poisoning. These would include fatigue, twitching, cramps, and muscle weakness including the muscles necessary for breathing.

FIRST AID:

Move patient out of contaminated area and **SEEK TREATMENT ADVICE FROM A POISON CENTRE OR PHYSICIAN.**

Skin contact:

Remove contaminated clothing immediately and rinse the affected skin area with plenty of cold water and soap.

Eye contact:

In case of contact with eyes, hold eyelids open and rinse with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye thoroughly with water.

Ingestion:

Do not induce vomiting. Wash mouth out with water. Do not give anything by mouth to an unconscious person.

Advice to physician:

There is no antidote. Treat symptomatically and supportively. In case of ingestion perform gastric lavage then administer activated charcoal (carbo medicinalis) and sodium sulfate.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Foam, sand, water spray or carbon dioxide (CO₂).



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Specific hazards during firefighting:

In the event of a fire the following hazardous decomposition products can be released: hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), carbon monoxide (CO), nitrogen oxides (NO_x)

Special protective equipment for fire-fighters:

Wear a fire resistant suit with self-contained breathing apparatus. No unprotected person should be allowed in the vicinity.

Further information:

Cool closed containers exposed to fire with water spray. Contain the spread of the fire-fighting media. Do not allow run-off from the fire fighting to flow into drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

Precautions:

Clear unauthorised personnel from the contaminated area.

Personal precautions:

Wear personal protective equipment. Avoid contact with spilled product or contaminated surfaces.

Environmental precautions:

Do not discharge spillage or wash water into drains/surface water/groundwater. If spillage enters drains leading to sewage works inform local water company immediately.

Occupational spill:

Absorb the spillage with sand, soil or a proprietary absorbent material. Collect with a spade and deposit in a secure, properly labeled, closed container for recovery or disposal. Dispose of contaminated soil in the same way. In the case of spillage in water, use barrier devices to prevent dispersion of the product. Collect and treat spillage as above. Contact the competent authorities if the situation cannot be controlled. Clean contaminated floors and objects thoroughly, observing environmental regulations. Use dry absorbent material to absorb and collect wash water for proper disposal.

Additional advice:

For information regarding personal protective equipment, see section 8. For information regarding waste disposal, see section 13.

7. HANDLING AND STORAGE

Handling:

Use only as directed on the label.

Storage:

Store under lock and key. Store in original container in a cool, dry, well ventilated place. Keep container tightly closed. Keep out of reach of children, uninformed persons and animals. Keep away from food, drink and animal feed.

Stability:

Avoid extreme temperatures. Store below 40°C. Do not store at temperatures lower than -10° C.

Suitable packaging:

Only use containers that are approved specifically for the product.

7. EXPOSURE CONTROL / PERSONAL PROTECTION

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations apply.

Respiratory protection:

Wear respirator with a particle filter mask (protection factor 4) conforming to European norm EN149FFP1 or equivalent.

Respiratory protection should only be used to control residual risk of short duration activities, when all reasonably practicable steps have been taken to reduce exposure at source e.g. containment and/or local extract ventilation. Always follow respirator manufacturer's instructions regarding wearing and maintenance.

Protective clothing when mixing and applying:

Protective gloves for chemicals, face shield (mixing only), boots and overall.

Occupational health:

Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke whilst applying or before washing hands and face. Wash hands before breaks and at the end of the working day. Remove soiled clothing immediately and clean thoroughly before using again. Keep working clothes separately.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Viscous liquid

Colour:

White

Odour:

Mild chemical odour

Foaming: (dilution 66 ml/l) CIPAC MT 47

Before ageing:

After:	1 min	5 min
	10 ml	8 ml



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After 14 days at 54°C

1 min	5 min
15 ml	15 ml

Flash point:

Not highly flammable

pH: (1 % solution) CIPAC MT 75

Before ageing: 6,68 After ageing: 6,81

Suspensibility/Resuspensibility: CIPAC MT 15/184

Dilution 33 ml/l 82 %

Dilution 66 ml/l 94 %

Wet sieve: CIPAC MT 185

Retention on 75µm 0,017 %

Density: based on CIPAC MT 3

Before ageing: After 14 days at 54°C

1,0107 g/ml 1.0066 g/ml

10. STABILITY AND REACTIVITY

Storage stability:

Stable for up to 2 years under normal warehouse and field conditions.

11. TOXICOLOGICAL INFORMATION

Data on Imidacloprid a.i.

Acute oral LD₅₀:

> 450 mg/kg body weight in rats.

Acute dermal LD₅₀:

> 5 000 mg/kg in rabbits.

Acute inhalation LC₅₀ (4 h):

(LC₅₀) is > 69 mg/meters cubed air in the form of an aerosol, and > 5 323 mg/meters cubed air in the form of dust. These values represent the maximum attainable airborne concentrations

Acute skin irritation:

Non-irritant.

Acute eye irritation:

Non-irritant.

Dermal sensitisation:

Not a skin sensitiser.

Carcinogenicity:

Imidacloprid is not considered to be carcinogenic.

Teratogenicity / Reproductive hazard:

Teratogenic effects were not observed.

Mutagenicity:

Imidacloprid may be weakly mutagenic

Neurotoxicity:

Neurobehavioral changes were observed only in male rats at the high dose.

12. ECOLOGICAL INFORMATION

Degradability: (Technical material)

The half-life of imidacloprid in soil is 48-190 days, depending on the amount of ground cover (it breaks down faster in soils with plant ground cover than in fallow soils)

Mobility:

There is generally not a high risk of groundwater contamination with imidacloprid if used as directed.

Accumulation:

Will not accumulate in soil.

Water:

The half-life in water is much greater than 31 days at pH 5, 7 and 9.

ECOTOXICOLOGY:

NB Figures for a.i and not for formulated product

Birds:

Imidacloprid is toxic to upland game birds. The LD₅₀ is 152 mg/kg for bobwhite quail, and 31 mg/kg in Japanese quail

Fish:

The toxicity of imidacloprid to fish is moderately low. The 96-hour LC₅₀ of imidacloprid is 211 mg/l for rainbow trout, 280 mg/l for carp, and 237 mg/l for golden orfe.

Daphnia:

LC₅₀ (48h): 85 mg/l

Bees:

Acute 48 hour LD₅₀ 0,0037 µg/bee. Imidacloprid is highly toxic to bees. Follow label directions to minimize danger to bees.

Algae:

Acute 72 hour EC₅₀, growth > 10 mg/l (*Scenedesmus subspicatus*)

Earthworms LC₅₀:

Acute 14 day LC₅₀ 10.7 mg /kg dry soil.

13. DISPOSAL CONSIDERATIONS

Pesticide disposal:

Small amounts of pesticide should be disposed of at an authorized special waste facility. Contact the supplier/manufacturer, where large amounts of product have become unusable. Never pour untreated waste or surplus products into public sewers or where there is any



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danger of run-off or seepage into water systems. Comply with all national/local legislation applying to waste disposal.

Package product wastes:

Empty containers retain vapour and product residues. Observe all labeled safeguards until container is destroyed. Combustible containers should be disposed of in pesticide incinerators. Other containers must be triple rinsed with water and then punctured before disposal in an approved landfill site. Comply with all national/local legislation applying to disposal.

14. TRANSPORT INFORMATION

UN NUMBER: Not regulated for any mode of transport.

Tremcard No: None necessary.

15. REGULATORY INFORMATION

Symbol :	Xn
Indication of danger:	Harmful
Risk phrases:	
R22	Harmful if swallowed.
R52	Harmful to aquatic organisms.
Safety phrases:	
S 1/2	Keep locked up and out of reach of children.
S3	Keep in a cool place.
S13	Keep away from food, drink and animal feed.
S23	Do not breathe vapour/spray
S24/25	Avoid contact with skin and eyes.
S 28	After contact with skin wash immediately with plenty of water and non-abrasive soap.
S35	This material and its container must be disposed of in a safe way.
S 36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S46	If swallowed, seek medical advice immediately and show this container or label

National Legislation:

In accordance with the South African National Traffic Act, 1996 (Act 93 of 1996), the Fire Brigade Act, 1987 (Act 99 of 1987), the Occupational Health and Safety Act, 1993 (Act. No. 85 of 1993 as amended and the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act No. 36 of 1947 as amended).

16. OTHER 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

- *The Pesticide Manual*; Thirteenth Edition; Editor Clive Tomlin; Crop Protection Publications, 2003.
- E X T O X N E T [Extension Toxicology Network]; Pesticide Information Profiles.
- Dangerous Goods Regulations; IATA 2006; International Air Transport Association, 49th Edition, Effective 1 January 2008.
- *ADR, Vol.1*, 2005.
- *IMDG Code, Vol. 2*, 2005
- SABS 11014:2010

END OF SDS.