

SAFETY DATA SHEET



Publication date: March 1994 Sheet number: BES/SA 0073 Revised on: 4 July 2014 Revision number: 7

1) IDENTIFICATION OF THE SUBSTANCE / PREPARATION

Commercial name: **NEOPYBUTHRIN®**

Usage: Insecticide

Company identification: Bayer (Pty.) Ltd.
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Bayer (office hours only): +27 11 921 5310/5663/5471/5639
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Griffon Poison Information Centre: +27 82 446 8946

2) HAZARD IDENTIFICATION OF THE PRODUCT

Risk advice to man and the environment: May cause sensitization by skin contact.
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3) COMPOSITION / INFORMATION ON THE INGREDIENTS

Chemical nature:
Cold fogging concentrate (KN)
d-Allethrin/Permethrin/PBO: 3,0/1,5/3,0 g/l

Hazardous components:

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-phrases	Concentration [%]
d-Allethrin	584-79-2	Xn, N	R20/22, R50/53	0,15
Permethrin	52645-53-1 258-067-9	Xn, N	R20/22, R43, R50/53	0,3
Piperonyl butoxide	51-03-6 200-076-7	N	R50/53	0,3

For the full text of the R-phrases mentioned in this Section, see Section 16.

4) FIRST AID MEASURES

General advice: Remove contaminated clothing immediately and dispose of safely.

Inhalation: Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.

Skin contact: In case of skin contact, immediately wash with plenty of water and soap for at least 15 minutes. After skin contact: Apply Vitamin E cream or a simple body milk. If symptoms persist, call a physician.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention if irritation develops and persists.

Ingestion: Rinse out mouth and give water in small sips to drink. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

Notes to Physician:

Symptoms: Local: Skin and eye paraesthesia which may be severe, Usually transient with resolution within 24 hours. Eye and mucous membrane irritation, Cough.
Systemic: Discomfort in the chest, tachycardia, hypotension, nausea, abdominal pain, diarrhoea, vomiting, dizziness, blurred vision, headache, anorexia, somnolence, coma, convulsions, tremors, prostration.

Risks: This product contains a pyrethroid.
Must NOT be confused with organophosphorus compounds!

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Treatment: Local treatment: Initial treatment: symptomatic.
After eye contact: Instillation of local anaesthetic drops e.g. 1 % Amethocaine Hydrochloride eye drops.
Give Analgesics as necessary.

Treatment: Systemic treatment: Initial treatment: symptomatic.
Monitoring of respiratory and cardiac functions.
In case of ingestion perform gastric lavage, then administer charcoal (carbo medicalis) and sodium sulfate.
Anti-convulsive therapy: Diazepam i.v. is the remedy of choice; barbiturates, e.g. phenobarbital and calcium gluconate, may also be used.
In case of shortness of breath, give oxygen.
Contraindication: derivatives of adrenaline.
Contraindication: atropine.
Spontaneous recovery.
There is no specific antidote.

5) FIRE FIGHTING MEASURES

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which should not be used for safety reasons: High volume water jet.

Specific hazards during fire fighting: Dangerous gases are evolved in the event of a fire.

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat.
Whenever possible, contain fire-fighting water by diking area with sand or earth.

6) ACCIDENTAL RELEASE MEASURES

Personal precautions: Keep people away from and upwind of spill/leak.
Avoid contact with spilled product or contaminated surfaces.
When dealing with a spillage do not eat, drink or smoke.

Environmental precautions: Do not allow to get into surface water, drains and ground water.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Keep in suitable, closed containers for disposal.
Clean floors and contaminated objects with plenty of water.

Additional advice: Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.
Check also for any local site procedures.

7) HANDLING AND STORAGE

Storage: Store out of reach of children and animals.
Store in a cool, dry place away from sources of heat and naked flames.
Store away from feeds, foodstuffs, drinking water and eating utensils.

Cleaning of equipment after use: At the end of each day, all protective clothing and respirators shall be decontaminated, washed, rinsed and dried. Extra care must be taken when cleaning equipment after use.

Handling precautions: DO NOT spray near open flames.
Wash with soap and water if contaminated.
Do not eat, drink or smoke while applying or before washing hands and face or change of clothing.
Avoid excessive wetting of plastic, rubber or asphalt.
Contamination of all sources of drinking water, rivers, dams, crops or grazing shall be prevented.
Toxic to fish and wildlife.
Do not breathe spray mist excessively and avoid skin contact.

8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters:

Components	CAS-No.	Control parameters	Basis
Permethrin	52645-53-1	10 mg/m ³	OES BCS*
Piperonyl butoxide	51-03-6	500 ppm	OES BCS*

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*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Personal protective equipment:

In normal use and handling conditions: Wear rubber gloves.

In all other cases the following recommendations would apply:

Respiratory protection: No personal respiratory protective equipment normally required. 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.

Hand protection: Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness 0,40 mm). Wash when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed. Wash hands always before eating, drinking, smoking or using the toilet.

Eye protection: Wear goggles conforming to EN166 (Field of Use 5 or equivalent).

Skin and body protection: Wear standard coverall and type 3 suit. Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

Hygiene measures: When using, do not eat, drink or smoke.
Remove soiled clothing immediately and clean thoroughly before using again.
Wash hands immediately after work, if necessary take a shower.

9) PHYSICAL AND CHEMICAL PROPERTIES

Description: A clear, colourless liquid.

Flash point: 78 °C

Compatibility: Avoid excessive wetting of plastic, rubber or asphalt surfaces.

Degradation: For deltamethrin the microbial degradation of deltamethrin in soil within 1 to 2 weeks.

10) STABILITY AND REACTIVITY

Conditions to avoid: Extremes of temperature and direct sunlight.

Hazardous reactions: No hazardous reactions when stored and handled according to prescribed instructions.
Stable under recommended storage conditions.

11) TOXICOLOGICAL INFORMATION

Toxicity:
The product is harmful if inhaled, swallowed and/or on skin contact.
(permethrin)

LD₅₀ acute oral, rats: 430 to 4 000 mg/kg

LD₅₀ acute dermal, rats: 4 000 mg/kg

LD₅₀ acute dermal, rabbits: > 2 000 mg/kg

LC₅₀ (4 hour) acute inhalation, rats: 2,3 mg/l air

(d-Allethrin)

LD₅₀ acute oral, rats: 620 to 1 000 mg/kg

LD₅₀ acute dermal, rabbits: 1 545 mg/kg

(piperonyl butoxide)

LD₅₀ the acute oral, rats: 7 960 mg/kg

LD₅₀ acute dermal, rats: > 8 000 mg/kg

12) ECOLOGICAL INFORMATION

Toxicity to fish: The material is toxic to fish.

13) DISPOSAL CONSIDERATIONS

Disposal of residue: Residue may be disposed of as for toxic waste in accordance with local/national regulations.

Disposal of used packaging material: Empty containers to be disposed of as toxic waste in accordance with local/national regulations.
DO NOT re-use for any other purpose.

14) TRANSPORT INFORMATION

UN Number: 3082

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Class: 9
IMDG: -
Ems: F-A, S-F
MFAG: -
Subsidiary risk: •
Packing group: III

Declaration for land shipment: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(permethrin solution)

Declaration for sea shipment: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(permethrin solution)

Declaration for shipment by air: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(permethrin solution)

Marine pollutant.

15) REGULATORY INFORMATION

Classification and labelling in accordance with the EC Directive on dangerous preparations 1999/45/EC as amended.

Classification: Hazard warning labelling compulsory.

Hazardous components which must be listed on the label: d-Allethrin
Permethrin
Piperonyl butoxide

Symbol(s):

Xi: Irritant.

N: Dangerous for the environment.

R-phrases(s):

R43: May cause sensitization by skin contact.

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

S-phrases(s):

S24: Avoid contact with skin.

S35: This material and its container must be disposed of in a safe way.

S37: Wear suitable gloves.

S57: Use appropriate container to avoid environmental contamination.

Exceptional labelling: To avoid risks to man and the environment, comply with the instructions for use.

WHO Classification: II (moderately hazardous)

16) OTHER INFORMATION

Text of R-phrases mentioned in Section 3:

R20/22: Harmful by inhalation and if swallowed.

R43: May cause sensitization by skin contact.

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

R65: Harmful: may cause lung damage if swallowed.

R66: Repeated exposure may cause skin dryness or cracking.

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the product's properties.

Consult the label for the directions for use.

THIS INFORMATION CONCERNS ONLY THE PRODUCT AS CONFORMING TO ITS SPECIFICATIONS AND LIMITED TO THE USES HEREIN STATED.

This sheet complements the technical sheet of use but does not replace it. The information contained on this sheet is based on knowledge of the product on the date of publication. It is given in good faith.

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