

# SAFETY DATA SHEET



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## 1) IDENTIFICATION OF THE SUBSTANCE / PREPARATION

Commercial name:                    **RESPONSAR® HOT FOG**

Usage:                                    Insecticide

Company identification:            Bayer (Pty.) Ltd.  
Reg. No. 1968/011192/07  
P.O. Box 143, Isando 1600  
SOUTH AFRICA

Telephone:                            +27 11 365 8600  
   +27 11 921 5429

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Responsible department:         Product Development and Regulatory Affairs  
   +27 11 921 5429/5471/5639  
   sharika.bajjnath@bayer.com

In case of poisoning emergencies:  
Bayer (office hours only):         +27 11 921 5429/5471/5639  
Tygerberg Poison Centre:         +27 21 931 6129  
Griffon Poison Information Centre: +27 82 446 8946

## 2) HAZARD IDENTIFICATION OF THE PRODUCT

Risk advice to man and the environment: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Material can form flammable mixtures or can burn only upon heating to temperatures at or above flash point.  
Static discharge: Product can accumulate static charges which can cause an incendiary electrical discharge.

## 3) COMPOSITION / INFORMATION ON THE INGREDIENTS

Chemical nature:    Hot Fogging Concentrate (HN)  
                                  Cyfluthrin 2,2 g/l

Hazardous components:

Chemical Name	CAS-No. / EINECS-No.	Symbol(s)	R-pharse(s)	Concentration [%]
Cyfluthrin	68359-37-5 269-855-7	T+, N	R23, R28, R50/53	0,22

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

## 4) FIRST AID MEASURES

General advice: Move out of dangerous area. If the patient is likely to become unconscious, place and transport in stable sideways position. Remove soiled or soaked clothing immediately and dispose of safely.

Inhalation:                    Move the patient to fresh air and keep at rest.

Skin contact:                Wash off immediately with soap and plenty of water. Apply Vitamin E cream or simple body milk. Call a physician or poison control center immediately.

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. Call a physician or poison control center immediately.

Ingestion:                    Do not induce vomiting. Wash out mouth with water. Call a physician or poison control center immediately.

### 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, bronchial hypersecretion, pulmonary oedema, tachycardia, low blood pressure, palpitation, vomiting, diarrhoea, abdominal pain, nausea, salivation, dizziness, blurred vision, headache, apathy, anorexia, somnolence, coma, spasm, convulsions, tremors, ataxia, muscular fasciculation.

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

Treatment:                Local treatment: After eye contact: Instillation of local anaesthetic drops e.g. 1 % Amethocaine Hydrochloride eye

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drops. Give Analgesics as necessary.  
Systemic treatment: Endotracheal intubation and gastric lavage, followed by administration of charcoal and sodium sulphate.  
Monitoring of respiratory and cardiac functions.  
Anti-convulsive therapy: Diazepam i.v. is the remedy of choice; barbiturates, e.g. phenobarbital and calcium gluconate, may also be used.  
There is no specific antidote.  
Contraindication: Derivatives of adrenaline.  
Contraindication: Atropine.  
Spontaneous recovery.

## 5) FIRE FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide (CO<sub>2</sub>), foam, sand.

Specific hazards during fire fighting:

In the event of fire the following can be released: Hydrogen chloride (HCl), hydrogen cyanide (hydrocyanic acid), hydrogen fluoride, carbon monoxide (CO), nitrous gases (NO<sub>x</sub>).

Special protective equipment: In the event of fire and/or explosion do not breathe fumes. Use self-contained breathing apparatus.

Further information: Contain the spread of the fire-fighting media.  
Do not allow run-off from fire fighting to enter drains or water courses.

## 6) ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid contact with spilled product or contaminated surfaces.  
Wear personal protective equipment. Unprotected persons must be kept away.

Environmental precautions: Do not discharge into the drains, surface water and groundwater.

Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).  
Clean contaminated floors and objects thoroughly, observing environmental regulations.  
Pack spilled material in suitable, closed containers for recovery or disposal.

Additional advice: Information regarding personal protective equipment, see section 8.  
Information regarding waste disposal, see section 13

## 7) HANDLING AND STORAGE

Advice on safe handling: Static discharge: Product can accumulate static charges which can cause an incendiary electrical discharge.

Storage: Store in original container at temperatures not exceeding 50 °C.  
Keep container tightly closed in a dry and well-ventilated place.  
Keep out of reach of children, animals and uninformed persons.  
Keep away from food, drink and animal feedingstuffs.

## 8) EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal protective equipment:

In normal use and handling conditions: Wear protective clothing, overall, rubber gloves and respirator during application.

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 6 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: Avoid contact with skin, eyes and clothing.  
Keep working clothes separately.  
Wash hands before breaks and immediately after handling the product.  
Remove soiled clothing immediately and clean thoroughly before using again.  
Garments that cannot be cleaned must be destroyed (burnt).

## 9) PHYSICAL AND CHEMICAL PROPERTIES

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Form: Liquid  
Colour: Clear  
Vapour pressure: 0.002 kPa at 20 °C, 0.008 kPa at 38 °C, 0.028 kPa at 55 °C  
Density: Approx. 0.815 g/cm<sup>3</sup> at 15 °C  
Solubility in water: <0.10 Wt% at 20 °C  
Viscosity: 3.19 Cst at 25 °C  
Flash point: >101 °C

## 10) STABILITY AND REACTIVITY

## 11) TOXICOLOGICAL INFORMATION

Acute toxicity (active ingredient):  
LD<sub>50</sub> oral, rat: 500 mg/kg (in xylol)  
LD<sub>50</sub> dermal, rat: > 5000 mg/kg (Bayer)

Irritation of the skin/rabbit: Non-irritant\*

Irritant to the mucous membranes/rabbit: Slightly irritant \*

\*Information refers to the active ingredient, cyfluthrin.

## 12) ECOLOGICAL INFORMATION

Fish toxicity: (active ingredient)

LC <sub>50</sub> :	3,2 µg/l (96 h)	Golden orfe ( <i>Leuciscus idus</i> )	(Bayer)
	0,68 µg/l (96 h)	Rainbow trout ( <i>Oncorhynchus mykiss</i> )	(Bayer)
	1,5 µg/ (96 h)	( <i>Lepomis macrochirus</i> )	(Bayer)

Toxicity for Daphnia: (active ingredient)

EC <sub>50</sub> :	0,16 µg/l (48 h)	Water flea ( <i>Daphnia magna</i> )	(Bayer)
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Toxicity for algae: (active ingredient)

Growth rate:

IC50:	> 10 mg/l	Green algae ( <i>Scenedesmus subspicatus</i> )	(Bayer)
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## 13) DISPOSAL CONSIDERATIONS

Product disposal: Disposal considerations In cases where larger amounts of the product have become unusable, it should be established whether material utilisation is possible (if necessary, consult the manufacturer/suppliers). Small amounts of the product and uncleaned empty packaging should be packaged and sealed, labelled and transferred to a suitable incinerator in accordance with the local regulations.

Packaging disposal: Disposal in accordance with local legal provisions.

## 14) TRANSPORT INFORMATION

ADNR:	Not dangerous goods
ADR:	Not dangerous goods
GGVE:	Not dangerous goods
GGVS:	Not dangerous goods
IATA_C:	Not dangerous goods
IATA_P:	Not dangerous goods
IMDG:	Not dangerous goods
RID:	Not dangerous goods

## 15) REGULATORY INFORMATION

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

Classification: Labelling according to EC Directives

Hazardous components which must be listed on the label: Cyfluthrin

Symbol(s):  
Xi: Irritant.

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N: Dangerous for the environment.

R-phrases(s):

R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

R36/37/38: Irritating to eyes, respiratory system and skin.

R51: Toxic to aquatic organisms.

S-phrases(s):

S1/2: Keep locked up and out of reach of children.

S3: Keep in a cool place.

S13: Keep away from food, drink and animal feedingstuffs.

S23: Do not breathe spray mist.

S36/37/39: Wear suitable protective clothing, gloves and eyes/face protection.

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:

R23: Toxic by inhalation.

R28: Very toxic if swallowed.

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

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

Consult the label for 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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