

## Safety Data Sheet

064304/10

Date of issue: February 7, 2000

Page 01 of 05

## 1. Identification of the substance/preparation and the company

Solfac WP 10

00299413

Bayer AG, PF-P+T Umweltschutz und Sicherheit

D-41538 Dormagen, Telephone: (02133) 515012

In case of emergency: (0214) 303030 (Werkfeuerwehr Bayer Leverkusen)

## \*2. Composition/information on ingredients

preparation contains

cyfluthrin

weight %: 10

CAS No.: 68359-37-5

hazard symbols: T+, N

Index No.: 607-253-00-1 R-phrases: 23-28-50/53

alkylarylsulphonate

weight %: approx. 1

CAS No.: 91078-64-7

hazard symbol: Xn

Index No.: -- R-phrases: 20/22-41-52/53

## 3. Hazards identification

Irritating to eyes and skin.

## 4. First-aid measures

GENERAL INFORMATION:

Remove patients from the danger zone. If there is a risk of unconsciousness, position and transport in stable lateral position. Also heed the risks to your own person. Remove soiled or soaked clothing immediately.

UPON INHALATION:

Bring accident victims out into the fresh air. Call doctor immediately.

FOLLOWING SKIN CONTACT:

Wash skin immediately with copious amounts of water and soap. Then seek medical advice.

FOLLOWING EYE CONTACT:

Rinse eyes thoroughly with water. Consult an eye specialist.

UPON SWALLOWING:

Call emergency doctor immediately.

INFORMATION FOR THE PHYSICIAN:

See Chapter 11 for information on toxicology.

The active ingredient listed in Chapter 2 belongs to the following chemical group: pyrethroid.

Therapeutic measures: Basic aid, decontamination, symptomatic treatment. For further recommendations see "Wirkstoffe in Pflanzenschutz- und Schädlingsbekämpfungsmitteln, Physikalisch-chemische und toxikologische Daten" (Active Ingredients in Crop Protection Products and Pesticides, Physico-Chemical and Toxicological Data). Published by Industrieverband Agrar e.V., D-60329 Frankfurt am Main, Germany 1990.

**Safety Data Sheet**

064304/10

Date of issue: February 7, 2000  
Solfac WP 10

00299413

Page 02 of 05

**5. Fire-fighting measures**

Extinguishing media: sprayed water jet, foam, extinguishing powder, CO<sub>2</sub>, sand

Fight fire in early stages if safe to do so.

Wear respiratory protection.

Well ventilated areas: full face mask with combination filter, e.g. ABEK-P2 (offers no protection from carbon monoxide!)

Enclosed premises: respirator with independent air supply.

Contain firefighting water.

In the event of fire, the formation of hydrogen chloride, hydrogen cyanide, hydrogen fluoride, carbon monoxide and nitrogen oxides must be anticipated.

**6. Accidental release measures**

Use the personal protective equipment listed in Chapter 8. Do not empty into drains or waters. Take up spilled product with dust-binding material or suitable vacuum cleaner. Avoid formation of dust. Fill materials taken up into closable container. To clean the floor and all objects contaminated by this material, use damp cloth. Also place used cleaning materials into closable receptacles.

**7. Handling and storage****INFORMATION ON SAFE HANDLING:**

When using open containers, use local exhaust ventilation to prevent dusts from spreading. Make provision for product and fire-fighting water to be retained.

**INFORMATION ON FIRE AND EXPLOSION PREVENTION:**

Take precautions to prevent formation of explosive mixtures:

Keep away from sources of ignition - No smoking.

Follow the explosion protection guidelines of the "Berufsgenossenschaft der Chemischen Industrie" (Employers' Liability Insurance Association for the German Chemical Industry).

Keep container tightly closed.

Prevent formation of dust deposits and whirling-up of dust.

**INFORMATION ON STORAGE:**

See Chapter 15 for storage regulations.

Observe the rules contained in the VCI concept for separate/common storage. For reasons of quality assurance, keep dry at temperatures under 50 °C.

Store so that unauthorised persons do not have access. Keep away from food, drink and animal feeding stuffs.

**8. Exposure controls/Personal protection**

For technical protective measures to limit exposure see also Chapter 7 "Handling and storage".

Workplace-related thresholds are listed in Chapter 15 "Regulations".

(to be continued)

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**Safety Data Sheet**

064304/10

 Date of issue: February 7, 2000  
 Solfac WP 10

00299413

Page 03 of 05

**8. Exposure controls/Personal protection (Continuation)**

If product is handled while not enclosed, and if skin contact may occur:

Respiratory protection: Fine dust mask (Class P1)

Respiratory protection instructions ZH1/701 issued by the German Confederation of Commercial Employers' Accident Liability Insurance Associations must be observed.

Hand protection: protective gloves for chemicals

Other protective equipment: In special cases additional measures for personal protection may be necessary, e.g. wearing protective hood, chemical-resistant and possibly antistatic protective gloves or boots, and chemical-resistant suit with or without independent air supply.

**Occupational health:**

Keep the place of work clean. Avoid contact with product. Keep working clothes separate. Change badly soiled or soaked clothing. Wash the hands before breaks. Take a shower or a bath at end of work.

**\*9. Physical and chemical properties**

tested in accordance with

Form: solid, powder

Colour: beige

Odour: slight characteristic smell

pH value: 6,0-7,5 at 1 % in water

Melting point: > 200 °C

Bulk volume fluffed: approx. 380 ml/100 g

Bulk volume jolted: approx. 300 ml/100 g

Solubility in water: dispersible

Partition coefficient: log P octanol/water =  
cyfluthrin: 5,9 to 6,0 at 20-°C

Solid products combustibility: B2 3 = local burning or glowing with, at the most, only slight spreading (VDI 2263).

Impact sensitivity: > 40 joule i.e. not sensitive to impact (in BAM dropping weight test; BAM = German Federal Institute for Materials Testing)

Risk of dust explosion: may cause dust explosion

**10. Stability and reactivity****11. Toxicological information****Acute toxicity:**

LD<sub>50</sub> oral, rat: > 2000 mg/kg (Bayer)

LD<sub>50</sub> dermal, rat: > 5000 mg/kg (Bayer)

LC<sub>50</sub> inhalation, rat: > 0,225 mg/l, 4 h of exposure (highest technical producible concentration). (Bayer)

Irritation of the skin/rabbit: non-irritant (Bayer)

Irritant to the mucous membranes/rabbit: slightly irritant (Bayer)

**Experience in man:**

Stimulatory sensations, such as a burning and tingling sensation, are possible after skin contact. (Bayer)

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**Safety Data Sheet**

064304/10

Date of issue: February 7, 2000  
Solfac WP 10

00299413

Page 04 of 05

**\*12. Ecological information**

Fish toxicity: (active ingredient)

LC<sub>50</sub>: 3,2 µg/l (96 h); Golden orfe (*Leuciscus idus*) (Bayer)LC<sub>50</sub>: 0,47 µg/l (96 h); Rainbow trout (*Oncorhynchus mykiss*) (Bayer)LC<sub>50</sub>: 1,0 µg/l (96 h); (*Lepomis macrochirus*) (Bayer)

Toxicity for Daphnia: (active ingredient)

EC<sub>50</sub>: 0,16 µg/l (48 h); Water flea (*Daphnia magna*) (Bayer)

Toxicity for algae: (active ingredient)

Growth rate:

IC<sub>50</sub>: > 10 mg/l (72 h); Green algae (*Scenedesmus subspicatus*) (Bayer)

Toxicity to bacteria: (active ingredient)

EC<sub>50</sub>: > 10000 mg/l; activated sludge (OECD 209) (Bayer)

Crop protection chemicals must be strictly prevented from reaching water-courses. They must therefore be stored in line with safety regulations for materials in 'Wassergefährdungsklasse' 3.

(Water pollution class (WGK): 3 - high impairment of water quality

WGK = Classification in accordance with the German Water Resources Act).

As a result it is sufficient to classify crop protection chemicals in the WGK and label accordingly.

**13. 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.

European Waste Catalogue (EWC) code: 070499, 020105

**14. Transport information**

GGVSee/IMDG Code: 9 UN No.: 3077 MFAG: NO EmS: NO

PG: III MPO: P

GGVE/GGVS: Class 9 No. 12C RID/ADR: Class 9 No. 12C

Warning sign: Hazard no. 090 Substance no. 3077

ADNR: Class 9 No. 12C Cat -- ICAO/IATA-DGR: 9 3077 III

Limited quantity regulation applicable in accordance with a-marginal-number GGVE/RID/GGVS/ADR/ADNR in compliance with threshold value

Declaration for land shipment: 3077, Umweltgefahrdender Stoff, fest, n.a.g.

(ENTHAELT 10% CYFLUTHRIN)

Declaration for sea shipment: Environmentally hazardous substance, solid, n.o.s.

(CONTAINS 10% CYFLUTHRIN)

Declaration for shipment by air: Environmentally hazardous substance, solid, n.o.s.

(CONTAINS 10% CYFLUTHRIN)

Other information:

Environmentally hazardous substance (GGVE/GGVS, RID/ADR). Marine pollutants. Avoid heat above +50 °C. Keep dry. Keep separated from foodstuffs.

## Safety Data Sheet

064304/10

Date of issue: February 7, 2000  
Solfac WP 10

00299413

Page 05 of 05

**14. Transport information** (Continuation)

Further information can be found in section 16.

**15. Regulatory information**

Labelling in accordance with directive 88/379/EEC (preparations) and its amendments and adaptations:

Symbol: Xi, hazard description: irritant

Contains: 10 % cyfluthrin

R 36/38: Irritating to eyes and skin.

S 22: Do not breathe dust.

This labelling is not required for products in packages intended for end users.

Threshold value in air defined by TRGS 900 (MAK value):

General limiting value of dust - 6 mg fine dust per m<sup>3</sup> air.

Major incidents regulations of September 20, 1991:

The preparation is a "pesticide/agrochemical or active ingredient thereof" in accordance with Appendix III, Part 1 No.21.

VCI storage class: 11

Note the following Guidelines and Directives of the Employers Liability Accident Insurance (BG Chemie):

M 004 "Reizende Stoffe - Ätzende Stoffe" (irritant - caustic substances)

M 050 "Umgang mit gesundheitsgefährlichen Stoffen" (regulations on the handling of substances hazardous to health)

M 053 "Allgemeine Arbeitsschutzmaßnahmen für den Umgang mit Gefahrstoffen" (general work safety measures for the handling of dangerous materials)

**16. Other information**

Wettable powder.

Application: insecticide

Note on Chapter 14:

The Declaration for land shipment is reproduced in German and applies in Europe and some of its adjoining states. It has been translated into

English as follows:

3077, Environmentally hazardous substance, solid, n.o.s.

(CONTAINS 10% CYFLUTHRIN)

Address in case of poisoning.

Bayer AG; Feuerwehr

fire or damage:

D-41538 Dormagen; Tel. 02133/514233

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.

