



DIFLUBENZURON WP 25C W

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Version 1 / IND
102000016129Revision Date: 03.12.2013
Print Date: 16.12.2013

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name DIFLUBENZURON WP 25C W U---
Product code (UVP) 06085228

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use Larvicide

1.3 Details of the supplier of the safety data sheet

Supplier Bayer CropScience Limited
Kolshet Road
400607 Thane (W)
Maharashtra
India

Telephone +91-22-25311030 / 25311234

Telefax +91-22-25455223

1.4 Emergency telephone no.

Indian Emergency Number 022-25311885 (24 hours/day)

Global Incident Response Hotline +1 (760) 476-3964 (Company 3E for Bayer CropScience)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to EU Directives 67/548/EEC or 1999/45/EC

N Dangerous for the environment, R50/53

2.2 Label elements

Labelling in accordance with the EU Directive on dangerous preparations 1999/45/EC, as amended.

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Diflubenzuron

Symbol(s)



N

Dangerous for the environment

R-phrases

R50/53

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

S-phrases

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S20/21 When using do not eat, drink or smoke.
 S35 This material must be disposed of in a safe way.
 S57 Use appropriate container to avoid environmental contamination.

2.3 Other hazards

Dust may form explosive mixture in air.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures****Chemical nature**Wettable powder (WP)
Diflubenzuron 25 % w/w**Hazardous components**R-phrases according to EC directive 67/548/EEC
Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No.	Classification		Conc. [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Diflubenzuron	35367-38-5 252-529-3	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	25.00
Sodium diisopropyl naphthalene sulphonate	1322-93-6 215-343-3	Xn; R20/22 Xi; R36/37	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335	>= 1.00 - <= 5.00
Sodium lauryl sulfate	68585-47-7 271-557-7	Xi; R38, R41	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318	>= 1.00 - <= 5.00

Further information

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

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

Inhalation When inhaled remove to fresh air and seek medical aid.

Skin contact Take off contaminated clothing and shoes immediately. Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water.

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. If eye irritation or redness persists, see an ophthalmologist.

Ingestion In the event of a mouthful or more being ingested, the following measures should be considered: Induce vomiting only, if: 1. patient is fully conscious, 2. medical aid is not readily available, 3. a significant amount (more than a mouthful) has been ingested and 4. time since ingestion is less than 1 hour. (Vomit should not get into the respiratory tract.) Rinse mouth. Call a physician or poison control center

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immediately.

4.2 Most important symptoms and effects, both acute and delayed**Symptoms** To date no symptoms are known.**4.3 Indication of any immediate medical attention and special treatment needed****Treatment** There is no specific antidote. Treat symptomatically. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media****Suitable** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Hazchem Code 2Z**5.2 Special hazards arising from the substance or mixture** Dangerous gases are evolved in the event of a fire.**5.3 Advice for firefighters****Special protective equipment for fire-fighters** Wear self-contained breathing apparatus and protective suit. In the event of fire and/or explosion do not breathe fumes.**Further information** Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures****Precautions** Use personal protective equipment. When dealing with a spillage do not eat, drink or smoke.**6.2 Environmental precautions** Do not allow to get into surface water, drains and ground water.**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up** Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal. When picked up, treat product as prescribed in Sec. 13. "Disposal considerations". Clean contaminated floors and objects thoroughly, observing environmental regulations.**Additional advice** Check also for any local site procedures.**6.4 Reference to other sections** Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling**

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Advice on safe handling	Avoid dust formation. Use only in area provided with appropriate exhaust ventilation.
Advice on protection against fire and explosion	Dust may form explosive mixture in air.
Hygiene measures	Wash hands immediately after work, if necessary take a shower. When using, do not eat, drink or smoke. Keep working clothes separately. Remove soiled clothing immediately and clean thoroughly before using again. Garments that cannot be cleaned must be destroyed (burnt).
7.2 Conditions for safe storage, including any incompatibilities	
Requirements for storage areas and containers	Keep containers tightly closed in a dry, cool and well-ventilated place. Store in original container. Keep out of the reach of children.
Advice on common storage	Keep away from food, drink and animal feedingstuffs.
7.3 Specific end uses	Refer to the label and/or leaflet.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters**

No control parameters known.

8.2 Exposure controls**Personal protective equipment**

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would 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.
Hand protection	Wear CE Marked (or equivalent) nitrile rubber gloves (minimum thickness of 0,4 mm). Wash when contaminated and dispose of when contaminated inside, when perforated or when contamination on the outside cannot be removed. Wash hands frequently and always before eating, drinking, smoking or using the toilet. Wash gloves when contaminated. Dispose of when contaminated inside, when perforated or when contamination outside cannot be removed.
Eye protection	Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).
Skin and body protection	Wear standard coveralls and Category 3 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. If there is a risk of significant exposure, consider a higher protective type suit.
General protective measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Form	powder
Colour	white to light yellow
Odour	odourless
pH	ca. 7 - 9 at 2 % (23 °C) (deionized water)
Flash point	>110 °C
Bulk density	0.35 - 0.45 g/ml (bulk density tapped)
Water solubility	dispersible
Partition coefficient: n-octanol/water	Diflubenzuron: log Pow: 3.89

9.2 Other information Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity****Thermal decomposition** Stable under normal conditions.**10.2 Chemical stability** Stable under recommended storage conditions.**10.3 Possibility of hazardous reactions** No hazardous reactions when stored and handled according to prescribed instructions.**10.4 Conditions to avoid** Extremes of temperature and direct sunlight.**10.5 Incompatible materials** Store only in the original container.**10.6 Hazardous decomposition products** No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute oral toxicity** LD50 (rat) 10,000 mg/kg**Acute inhalation toxicity** LC50 (rat) 3.52 mg/l
Exposure time: 4 h**Acute dermal toxicity** LD50 (rat) 20,000 mg/kg**Skin irritation** No skin irritation**Eye irritation** Mild eye irritation. (rabbit)**Sensitisation** Non-sensitizing. (guinea pig)**Assessment repeated dose toxicity**

Diflubenzuron did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity

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Diflubenzuron was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Diflubenzuron was not carcinogenic in lifetime feeding studies in rats and mice.

Assessment toxicity to reproduction

Diflubenzuron did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity

Diflubenzuron did not cause developmental toxicity in rats and rabbits.

Further information

No further toxicological information is available.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity to fish NOEC (Cyprinodon variegatus (sheepshead minnow)) 0.10 mg/l

Toxicity to aquatic invertebrates NOEC (Water flea (Daphnia magna)) < 6 mg/l

Toxicity to aquatic plants no validated data found

12.2 Persistence and degradability

Biodegradability Diflubenzuron:
not rapidly biodegradable

Koc Diflubenzuron: Koc: 1983 - 6918

12.3 Bioaccumulative potential

Bioaccumulation Diflubenzuron: Bioconcentration factor (BCF) 320
Does not bioaccumulate.

12.4 Mobility in soil

Mobility in soil Diflubenzuron: Slightly mobile in soils

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment Diflubenzuron: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

12.6 Other adverse effects

Additional ecological information No further ecological information is available.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Product In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

Contaminated packaging Empty remaining contents.
Do not re-use empty packagings.

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Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.

Waste key for the unused product **020108** agrochemical waste containing dangerous substances

Legal basis

Waste key in accordance with Schedule I of the Hazardous Waste Rules, 2008 as amended (India - EP Act):

29.1 Process wastes/residues
29.3 Date-expired and off-specification pesticides

SECTION 14: TRANSPORT INFORMATION**ADR/RID/ADN**

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIFLUBENZURON MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
Hazchem Code	2Z
Tunnel Code	E

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

IMDG

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIFLUBENZURON MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3077
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (DIFLUBENZURON MIXTURE)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES

14.6 Special precautions for user

See sections 6 to 8 of this Safety Data Sheet.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No transport in bulk according to the IBC Code.

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WHO-classification: U (Unlikely to present acute hazard in normal use)

Labeling according to Insecticide Rules 1971 as amended. (INDIA)Class III: Moderately toxic
Colour: bright blue
Danger!
Keep out of the reach of children.**15.2 Chemical Safety Assessment**

A chemical safety assessment is not required.

SECTION 16: OTHER INFORMATION**Text of R-phrases mentioned in Section 3**

R20/22	Harmful by inhalation and if swallowed.
R36/37	Irritating to eyes and respiratory system.
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.

Text of the hazard statements mentioned in Section 3

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

This data sheet has been generated according to the safety data sheet supplied by the manufacturer of the product:

The information contained within this Safety Data Sheet is in accordance with the guidelines established by Regulation (EU) 1907/2006 and Regulation (EU) 453/2010 amending Regulation (EU) No 1907/2006 (and any subsequent amendments). This data sheet complements the user's instructions, but does not replace them. The information it contains is based on the knowledge available about the product concerned at the time it was compiled. Users are further reminded of the possible risks of using a product for purposes other than those for which it was intended. The required information complies with current EEC legislation. Addressees are requested to observe any additional national requirements.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.