



DROPP ULTRA SC180 4X5L BOT ZA

Version 3 / EU
1020000006781/11
Revision Date: 26.11.2012
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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name DROPP ULTRA SC180 4X5L BOT ZA
Product code (UVP) 05935393

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

Use Herbicide, Growth regulator

1.3 Details of the supplier of the safety data sheet

Supplier Bayer CropScience AG
Alfred-Nobel-Straße 50
40789 Monheim am Rhein
GermanyTelefax +49(0)2173-38-7394
Responsible Department Product Safety and Specification Management
+49(0)2173-38-3409/3685 (during business hours only)
Email: BCS-SDS@bayer.com

1.4 Emergency telephone no.

Emergency telephone no. 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

Xi Irritant, R36/38
Carc.Cat.3, R40
R43
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:

- Diuron
- Thidiazuron

Symbol(s)



Xn Harmful

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N Dangerous for the environment

R-phrase(s)

R36/38

Irritating to eyes and skin.

R40

Limited evidence of a carcinogenic effect.

R43

May cause sensitization by skin contact.

R50/53

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

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

S-phrase(s)

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S35

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

S36/37

Wear suitable protective clothing and gloves.

S57

Use appropriate container to avoid environmental contamination.

2.3 Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2 Mixtures****Chemical nature**

Oil dispersion (OD)

Diuron/Thidiazuron 60:120 g/l

Hazardous components

R-phrase(s) according to EC directive 67/548/EEC

Hazard statements according to Regulation (EC) No. 1907/2006

Name	CAS-No. / EC-No.	Classification		Concentration [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Thidiazuron	51707-55-2 257-356-7	N; R51/53	Aquatic Chronic 2,	11,88
Diuron	330-54-1 206-354-4	Carc.Cat.3 R40 Xn; R22, R48/22 N; R50/53	Carc. 2, H351 Acute Tox. 4, H302 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	5,94
Fatty alcohol polyglycol ether 2-5 EO	68920-66-1	Xi; R41		> 5,00 - < 10,00

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Calcium dodecylbenzenesulfonate, branched	70528-83-5 274-654-2	Xi; R38, R41 N; R51/53	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	> 1,00 - < 5,00
1-Octanol	111-87-5 203-917-6	Xi; R36/38	Eye Irrit. 2, H319 Skin Irrit. 2, H315	> 1,00 - < 20,00
Lignin, alkali, reaction products with formaldehyde and sodium bisulfite	68512-35-6	Xi; R36/37	Eye Irrit. 2, H319 STOT SE 3, H335	> 1,00 - < 20,00

Further information

Diuron	330-54-1	M-Factor: 10 (acute)
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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****General advice**

Remove contaminated clothing immediately and dispose of safely.

Inhalation

Move to fresh air. Keep patient warm and at rest. When symptoms persist or in all cases of doubt seek medical advice.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

Rinse immediately with plenty of water and seek medical advice.

Ingestion

Do NOT induce vomiting. Rinse mouth, ingest activated charcoal. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Systemic: The absorption of this product into the body may lead to the formation of methaemoglobine that, in sufficient concentration, causes cyanosis. If large amounts are ingested, the following symptoms may occur: Dizziness, Headache, Apathy, Cyanosis

4.3 Indication of any immediate medical attention and special treatment needed**Risks**

Danger of formation of methaemoglobin.

Treatment

Local treatment:

Treat symptomatically.

Treatment

Systemic treatment:

In case of ingestion gastric lavage should be considered in cases of significant ingestions only within the first 2 hours. However, the application of activated charcoal and sodium sulphate is always advisable.



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In the event of a mouthful or more being ingested, the following measures should be considered:
Monitor: methaemoglobinaemia and serum potassium.
Monitor: cardiac, kidney and red blood cell count.
In case of methaemoglobinemia, oxygen and specific antidotes (methylene blue/ toluidine blue) should be given.
Contraindications: alcohol.
Recovery is spontaneous and without sequelae.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

In the event of fire the following may be released:

Nitrogen oxides (NO_x)
Carbon monoxide (CO)
Hydrogen chloride (HCl)
Hydrogen cyanide (hydrocyanic acid)
Sulphur oxides

5.3 Advice for firefighters

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit.

Further information

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

Use personal protective equipment.

6.2 Environmental precautions

Do not allow to get into surface water, drains and ground water.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

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.

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Keep away from heat and sources of ignition.

Hygiene measures

Keep away from food, drink and animal feedingstuffs.

Remove soiled clothing immediately and clean thoroughly before using again.

Avoid contact with skin, eyes and clothing.

Wash hands immediately after work, if necessary take a shower.

7.2 Conditions for safe storage, including any incompatibilities**Requirements for storage areas and containers**

Store in original container.

Keep away from direct sunlight.

Protect from freezing.

Store in a place accessible by authorized persons only.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Suitable materials

Coex EVOH (1000L IBC)

7.3 Specific end uses

Refer to the label and/or leaflet.

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

Components	CAS-No.	Control parameters	Update	Basis
Diuron	330-54-1	0,6 mg/m ³ (TWA)		OES BCS*
Thidiazuron	51707-55-2	1,1 mg/m ³ (TWA)		OES BCS*

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

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

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

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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 4 suit. If there is a risk of significant exposure, consider a higher protective type 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.

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

Form	Liquid
Colour	beige to light grey
Odour	weak, rancid
pH	7,0 - 8,4 at 1 % (23 °C) (deionized water)
Flash point	143,5 °C
Density	ca. 1,01 g/cm ³ at 20 °C
Partition coefficient: n-octanol/water	log Pow: 2,85 at 25 °C The value mentioned relates to the active ingredient diuron. log Pow: 1,5 The value mentioned relates to the active ingredient thidiazuron.

9.2 Other information

Further safety related physical-chemical data are not known.

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

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.



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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) > 5.000 mg/kg

Acute inhalation toxicity LC50 (rat) > 1,85 mg/l
Exposure time: 4 h
Highest attainable concentration.
Determined in the form of a respirable aerosol.

Acute dermal toxicity LD50 (rat) > 4.000 mg/kg

Skin irritation Irritating to skin. (rabbit)

Eye irritation Irritating to eyes. (rabbit)

Sensitisation Sensitising (guinea pig)
OECD Test Guideline 406, Buehler test
May cause sensitization by skin contact.

Assessment repeated dose toxicity
Thidiazuron did not cause specific target organ toxicity in experimental animal studies.
Diuron caused haemolytic anaemia in animal studies.

Assessment Mutagenicity
Thidiazuron was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.
Diuron was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity
A possible carcinogenic effect is indicated at high doses in animal studies on the active substance diuron.

Assessment Carcinogenicity
Thidiazuron was not carcinogenic in lifetime feeding studies in rats and mice.
Diuron caused at high dose levels an increased incidence of tumours in the following organ(s): urinary bladder, mammary gland. The mechanism that triggers tumours in rodents is not relevant for the low exposures encountered under normal use conditions.

Assessment Toxicity to Reproduction
Thidiazuron did not cause reproductive toxicity in a two-generation study in rats.
Diuron did not cause reproductive toxicity in a two-generation study in rats.

Assessment developmental toxicity
Thidiazuron caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Thidiazuron are related to maternal toxicity.
Diuron did not cause developmental toxicity in rats and rabbits.



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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity to fish

LC50 (Rainbow trout (*Oncorhynchus mykiss*)) 14,7 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient diuron.

LC50 (Rainbow trout (*Oncorhynchus mykiss*)) > 19 mg/l
static test; Exposure time: 96 h
The value mentioned relates to the active ingredient thidiazuron.

Toxicity to aquatic
invertebrates

EC50 (*Daphnia*) 1,4 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient diuron.

EC50 (Water flea (*Daphnia magna*)) 5,7 mg/l
static test; Exposure time: 48 h
The value mentioned relates to the active ingredient thidiazuron.

Toxicity to aquatic plants

IC50 (Algae) 0,022 mg/l
Exposure time: 72 h
The value mentioned relates to the active ingredient diuron.

IC50 (Algae) 13 mg/l
static test; Exposure time: 72 h
The value mentioned relates to the active ingredient thidiazuron.

12.2 Persistence and degradability

Biodegradability Not applicable for this mixture.

12.3 Bioaccumulative potential

Bioaccumulation Not applicable for this mixture.

12.4 Mobility in soil

Mobility in soil Not applicable for this mixture.

12.5 Results of PBT and vPvB assessment

Not relevant as no chemical safety report is necessary.

12.6 Other adverse effects

Additional ecological information

No other effects to be mentioned.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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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

Not completely emptied packagings should be disposed of as hazardous waste.

Waste key for the unused product

020108 agrochemical waste containing dangerous substances

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

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIDIAZURON, DIURON SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	90
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	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIDIAZURON, DIURON SOLUTION)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Marine pollutant	YES

IATA

14.1 UN number	3082
14.2 Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (THIDIAZURON, DIURON SOLUTION)
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.

SECTION 15: REGULATORY INFORMATION



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15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Occupational health precautions

Work limitations for pregnant women and for women nursing babies should be observed:
92/85/EEC.

Work limitations for youth should be observed: 94/33/EC.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: OTHER INFORMATION

Text of R-phrases mentioned in Section 3

R22	Harmful if swallowed.
R36/37	Irritating to eyes and respiratory system.
R36/38	Irritating to eyes and skin.
R38	Irritating to skin.
R40	Limited evidence of a carcinogenic effect.
R41	Risk of serious damage to eyes.
R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R51/53	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.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

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.

Bayer CropScience

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006



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