

**OXADIAZON EC 250 G****U-WW**Version 3 / EU  
1020000115151/11  
Revision Date: 30.07.2012  
Print Date: 07.09.2012**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Trade name	OXADIAZON EC 250 G	U-WW
Product code (UVP)	06425844	

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

Use	Herbicide
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**1.3 Details of the supplier of the safety data sheet**

Supplier	Bayer CropScience AG Alfred-Nobel-Straße 50 40789 Monheim am Rhein Germany
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Telefax	+49(0)2173-38-7394
Responsible Department	Product Safety and Specification Management +49(0)2173-38-3409/3189 (during business hours only) Email: BCS-MSDS@bayer.com

**1.4 Emergency telephone no.**

Emergency telephone no.	Global Incident Response Hotline (24h) +1 (760) 476-3964 (Company 3E for Bayer CropScience)
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**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Flammable liquids: Category 3

H226 Flammable liquid and vapour.

Aspiration hazard: Category 1

H304 May be fatal if swallowed and enters airways.

Skin irritation: Category 2

H315 Causes skin irritation.

Eye irritation: Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure: Category 3

H336 May cause drowsiness or dizziness.

Acute aquatic toxicity: Category 1

H400 Very toxic to aquatic life.

Chronic aquatic toxicity: Category 1

H410 Very toxic to aquatic life with long lasting effects.

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

R10

Xi Irritant, R36/38

N Dangerous for the environment, R50/53

Xn Harmful, R65

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**2.2 Label elements****Labelling in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures, as amended.**

Hazard label for supply/use required.

Hazardous components which must be listed on the label:

- Oxadiazon



Signal word:

Danger

**Hazard statements**

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.

**Precautionary statements**

P240	Ground/bond container and receiving equipment.
P280	Wear protective gloves/protective clothing/eye protection.
P309 + P311	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.
P501	Dispose of contents/container in accordance with local regulation.

**2.3 Other hazards**

No other hazards known.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Chemical nature**Emulsifiable concentrate (EC)  
Oxadiazon 250 g/l**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		Concentration [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	

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Oxadiazon	19666-30-9 243-215-7	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	25,40
Branched calcium dodecyl benzene sulfonate	68953-96-8 273-234-6	Xi; R38, R41 N; R51/53	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	> 1,00 - < 5,00
2-Methylpropan-1-ol	78-83-1 201-148-0	R10 Xi; R37/38, R41 R67	Flam. Liq. 3, H226 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336	> 1,00 - < 5,00
Ethoxylated polyaryphenol	99734-09-5	R52/53	Aquatic Chronic 3, H412	> 1,00 - < 25,00
Cyclohexanone	108-94-1 203-631-1	R10 Xn; R20	Flam. Liq. 3, H226 Acute Tox. 4, H332	> 1,00 - < 25,00
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5 265-198-5	Xn; R65 R66 R67 N; R51/53	Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411	> 25,00

**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****General advice**

Remove contaminated clothing immediately and dispose of safely.

**Inhalation**

Move the victim to fresh air and keep at rest. If symptoms persist, call a physician.

**Skin contact**

Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. 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 mouth. Keep at rest. Do NOT induce vomiting. Risk of product entering the lungs on vomiting after ingestion. Obtain medical attention.



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**4.2 Most important symptoms and effects, both acute and delayed**

Local:, To date no symptoms are known.

Systemic:, To date no symptoms are known.

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

**Treatment**

Local treatment:

Initial treatment: symptomatic.

**Treatment**

Systemic treatment:

Initial treatment: symptomatic.

Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate.

There is no specific antidote.

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**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable extinguishing media**

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

**Unsuitable extinguishing media**

High volume water jet

**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**

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.

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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

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.

**6.2 Environmental precautions**

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

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

Keep in suitable, closed containers for disposal.

Clean floors and contaminated objects with plenty of water.

**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.

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**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling****Advice on safe handling**

No specific precautions required when handling unopened packs/containers; follow relevant manual handling advice.

Ensure adequate ventilation.

**Advice on protection against fire and explosion**

Keep away from heat and sources of ignition.

Vapours may form explosive mixture with air.

Take measures to prevent the build up of electrostatic charge.

Use only explosion-proof equipment.

**Hygiene measures**

When using, do not eat, drink or smoke.

Remove soiled clothing immediately and clean thoroughly before using again.

Contaminated work clothing should not be allowed out of the workplace.

Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.

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 a place accessible by authorized persons only.

Keep containers tightly closed in a dry, cool and well-ventilated place.

Protect from freezing.

Keep away from direct sunlight.

**Advice on common storage**

Keep away from food, drink and animal feedingstuffs.

**7.3 Specific end uses**

Refer to the label and/or leaflet.

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

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Components	CAS-No.	Control parameters	Update	Basis
Oxadiazon	19666-30-9	0,28 mg/m <sup>3</sup> (TWA)		OES BCS*
Cyclohexanone	108-94-1	40,8 mg/m <sup>3</sup> / 10 ppm (TWA)	12 2009	EU ELV
Cyclohexanone	108-94-1	81,6 mg/m <sup>3</sup> / 20 ppm (STEL)	12 2009	EU ELV

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

## Additional advice

Observe: Exposure Limits In Air, Group 3: 100 mg/m<sup>3</sup>/ 20 ppm. (aromatic-rich hydrocarbon mixes with > 25% aromatics TRGS 901, No. 72).

**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 an organic vapours and gas filter mask (protection factor 10) conforming to EN140 type A 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 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. If chemical protection suit is splashed, sprayed or significantly contaminated, decontaminate as far as possible, then carefully remove and dispose of as advised by manufacturer.

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

Form	liquid
Colour	brown

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Odour	aromatic
Flash point	55 °C
Ignition temperature	> 450 °C The data refer to solvent naphtha petroleum.
Upper explosion limit	7,00 %(V) The data refer to solvent naphtha petroleum.
Lower explosion limit	0,8 %(V) The data refer to solvent naphtha petroleum.
Relative vapour density	1,00 The data refer to solvent naphtha petroleum.
Density	ca. 0,99 g/cm <sup>3</sup> at 20 °C
Water solubility	miscible

**9.2 Other information**

Further safety related physical-chemical data are not known.

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

no data available

**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.

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**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute oral toxicity LD50 (rat) &gt; 2.000 mg/kg

Acute inhalation toxicity LC50 (rat) > 5,04 mg/l  
Exposure time: 4 h

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Acute dermal toxicity	LD50 (rat) > 2.000 mg/kg
Skin irritation	Irritating to skin. (rabbit)
Eye irritation	Irritating to eyes. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig) OECD Test Guideline 406, Buehler test

**Assessment repeated dose toxicity**

Oxadiazon caused specific target organ toxicity in experimental animal studies in the following organ(s): liver, blood. The observed effects do not appear to be relevant for humans.

**Assessment Mutagenicity**

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

**Assessment Carcinogenicity**

Oxadiazon caused at high dose levels an increased incidence of tumours in the following organ(s): liver. The mechanism that triggers tumours in rodents and the type of tumours observed are not relevant to humans.

**Assessment Toxicity to Reproduction**

Oxadiazon caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Oxadiazon is related to parental toxicity.

**Assessment developmental toxicity**

Oxadiazon caused developmental toxicity only at doses toxic to the dams. The developmental effects seen with Oxadiazon are related to maternal toxicity.

**Further information**

The toxicological data refer to a similar formulation.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

Toxicity to fish	LC50 (Oncorhynchus mykiss (rainbow trout)) 1,2 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient oxadiazon.
Toxicity to aquatic invertebrates	EC50 (Water flea (Daphnia magna)) > 2,4 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient oxadiazon.
Toxicity to aquatic plants	EC50 (Scenedesmus subspicatus) 0,028 mg/l Biomass; Exposure time: 72 h Test conducted with a similar formulation.

**12.2 Persistence and degradability**

Biodegradability Not applicable for this mixture.

**12.3 Bioaccumulative potential**



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Bioaccumulation                      Lepomis macrochirus (Bluegill sunfish)  
 Bioconcentration factor (BCF): 1.111  
 The value mentioned relates to the active ingredient oxadiazon.

**12.4 Mobility in soil**

Stability in water                      no data available

Stability 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****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.

Do not empty into drains.

**Contaminated packaging**

Triple rinse containers.

Do not re-use empty containers.

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	<b>1993</b>
14.2 Proper shipping name	FLAMMABLE LIQUID, N.O.S. (OXADIAZON, CYCLOHEXANONE SOLUTION)
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environm. Hazardous Mark	YES
Hazard no.	30
Tunnel Code	D/E
Special Provision	640E

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	<b>1993</b>
14.2 Proper shipping name	FLAMMABLE LIQUID, N.O.S. (OXADIAZON, CYCLOHEXANONE SOLUTION)

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14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Marine pollutant	YES

**IATA**

14.1 UN number	<b>1993</b>
14.2 Proper shipping name	FLAMMABLE LIQUID, N.O.S. (OXADIAZON, CYCLOHEXANONE SOLUTION )
14.3 Transport hazard class(es)	3
14.4 Packing group	III
14.5 Environm. Hazardous Mark	NO

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

Further information

WHO-classification: III (Slightly hazardous)

**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

R10	Flammable.
R20	Harmful by inhalation.
R37/38	Irritating to respiratory system and skin.
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.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful 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.
R67	Vapours may cause drowsiness and dizziness.

Text of the hazard statements mentioned in Section 3

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H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.
H412	Harmful 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.

|| Reason for Revision: Safety Data Sheet according to Regulation (EU) No. 453/2010.

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