



## ACHIBA EC50 4X5L BOT UA

Version 4 / EU  
1020000017381/10  
Revision Date: 28.05.2014  
Print Date: 14.11.2017

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

#### 1.1 Product identifier

Trade name ACHIBA EC50 4X5L BOT UA  
Product code (UVP) 05923808

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

Use Herbicide

#### 1.3 Details of the supplier of the safety data sheet

Supplier Bayer AG  
Kaiser-Wilhelm-Allee 1  
51373 Leverkusen  
Germany

Telefax +49(0)2173-38-7394

Responsible Department Product Safety and Specification Management  
+49(0)2173-38-3409 (during business hours only)  
Email: BCS-SDS@bayer.com

#### 1.4 Emergency telephone no.

Emergency telephone no. ZCUST-X01.00000178  
+1 (760) 476-3964 (Company 3E for Bayer AG, Crop Science Division)

### 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.

Skin sensitisation: Category 1

H317 May cause an allergic skin reaction.

Serious eye damage: Category 1

H318 Causes serious eye damage.

Acute toxicity: Category 4

H332 Harmful if inhaled.

Specific target organ toxicity - single exposure: Category 3

H335 May cause respiratory irritation.

Specific target organ toxicity - single exposure: Category 3

H336 May cause drowsiness or dizziness.

Carcinogenicity: Category 2

H351 Suspected of causing cancer.

Acute aquatic toxicity: Category 1

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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

Xn Harmful, R20

Xi Irritant, R37/38

Carc.Cat.3, R40

Xi Irritant, R41

Xi Irritant, R43

N Dangerous for the environment, R50/53

Xn Harmful, R65

**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:**

- Quizalofop-P-ethyl
- Solvent Naphtha (petroleum), heavy aromatic
- Solvent Naphtha (petroleum), light aromatic



**Signal word:** Danger

**Hazard statements**

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
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.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/doctor/physician.
P501	Dispose of contents/container in accordance with local regulation.

**2.3 Other hazards**

No other hazards known.

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

Emulsifiable concentrate (EC)

Quizalofop-P-ethyl 50 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		Conc. [%]
		EC Directive 67/548/EEC	Regulation (EC) No 1272/2008	
Quizalofop-P-ethyl	100646-51-3 600-119-3	Xn; R22 N; R50/53	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	5,20
Alkylaryl sulfonate	26264-06-2 247-557-8	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	> 5,00 – < 10,00
Solvent Naphtha (petroleum), heavy aromatic	64742-94-5 265-198-5	Carc.Cat.3 R40 Xn; R65 R66 N; R51/53	Carc. 2, H351 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	> 1,00 – < 25,00
Polyoxyethylene alkylphenyl ether	9002-93-1 618-344-0	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	> 10,00
Solvent Naphtha (petroleum), light aromatic	64742-95-6 265-199-0	R10 Xi; R37 Xn; R65 R66 R67 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	> 25,00

**Further information**

Quizalofop-P-ethyl	100646-51-3	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**

<b>General advice</b>	Remove contaminated clothing immediately and dispose of safely.
<b>Inhalation</b>	Move to fresh air. Keep patient warm and at rest. If symptoms persist, call a physician.
<b>Skin contact</b>	Wash off thoroughly with plenty of soap and water, if available with polyethyleneglycol 400, subsequently rinse with water. If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water and seek medical advice.

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**Ingestion** Rinse mouth. Keep at rest. Do NOT induce vomiting. Risk of product entering the lungs on vomiting after ingestion. Obtain medical attention.

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

**Symptoms** Local: , Respiratory disorder

Systemic: , Ingestion may provoke the following symptoms: , Dizziness, Headache, Diarrhoea, Gastro-intestinal irritation, Vomiting, Nausea, Somnolence, Breathing difficulties, Cough, Cyanosis, Fever

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

**Treatment** Local treatment: Initial treatment: symptomatic.

Systemic treatment: Initial treatment: symptomatic. In case of aspiration intubation and bronchial lavage should be considered. Gastric lavage is not normally required. However, if a significant amount (more than a mouthful) has been ingested, administer activated charcoal and sodium sulphate. Monitor: kidney, liver and pancreas function. There is no specific antidote.

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

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

**Unsuitable** 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 and/or explosion do not breathe fumes. 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.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

**Precautions** 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. If the product contaminates rivers and lakes or drains inform respective authorities.

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**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. 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.

**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.

**Suitable materials** Coex HDPE/EVOH  
Black mild steel sheet with interior coating

**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
Quizalofop-P-ethyl	100646-51-3	0,65 mg/m <sup>3</sup> (TWA)		OES BCS*

\*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**

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**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 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.

**Eye protection**

Wear goggles (conforming to EN166, Field of Use = 5 or equivalent).

**Skin and body protection**

Wear standard coveralls and Category 3 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.  
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**

<b>Form</b>	Liquid
<b>Colour</b>	brown
<b>pH</b>	7,5
<b>Flash point</b>	53 °C
<b>Ignition temperature</b>	> 450 °C The data refer to solvent naphtha petroleum.
<b>Upper explosion limit</b>	7,00 %(V) The data refer to solvent naphtha petroleum.
<b>Lower explosion limit</b>	0,8 %(V) The data refer to solvent naphtha petroleum.
<b>Relative vapour density</b>	1,00 The data refer to solvent naphtha petroleum.
<b>Density</b>	ca. 0,96 g/cm <sup>3</sup> at 20 °C
<b>Water solubility</b>	miscible
<b>Partition coefficient: n-octanol/water</b>	Quizalofop-P-ethyl: log Pow: 4,61

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**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) 2.551 mg/kg

**Acute inhalation toxicity** LC50 (rat) 2,91 mg/l  
Exposure time: 4 h  
Irritating to respiratory system.

**Acute dermal toxicity** LD50 (rat) > 2.000 mg/kg

**Skin irritation** Irritating to skin. (rabbit)

**Eye irritation** Severe eye irritation. (rabbit)

**Sensitisation** Sensitising (guinea pig)  
OECD Test Guideline 406, Magnusson & Kligman test

**Assessment repeated dose toxicity**

Quizalofop-P-ethyl did not cause specific target organ toxicity in experimental animal studies.

**Assessment Mutagenicity**

Quizalofop-P-ethyl was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

**Assessment Carcinogenicity**

Quizalofop-P-ethyl was not carcinogenic in lifetime feeding studies in rats and mice.

**Assessment toxicity to reproduction**

Quizalofop-P-ethyl did not cause reproductive toxicity in a two-generation study in rats.

**Assessment developmental toxicity**

Quizalofop-P-ethyl did not cause developmental toxicity in rats and rabbits.

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



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<b>Toxicity to fish</b>	LC50 (Trout) 5,8 mg/l Exposure time: 96 h
<b>Toxicity to aquatic invertebrates</b>	EC50 (Daphnia) 7,2 mg/l Exposure time: 48 h
<b>Toxicity to aquatic plants</b>	EC50 (Algae) 1,27 mg/l Exposure time: 72 h  EC50 (Lemna gibba (duckweed)) 0,0828 mg/l The value mentioned relates to the active ingredient quizalofop-P-ethyl.

**12.2 Persistence and degradability**

**Biodegradability** Quizalofop-P-ethyl:  
not rapidly biodegradable

**Koc** Quizalofop-P-ethyl: Koc: 1816

**12.3 Bioaccumulative potential**

**Bioaccumulation** Quizalofop-P-ethyl: Bioconcentration factor (BCF) 380  
Does not bioaccumulate.

**12.4 Mobility in soil**

**Mobility in soil** Quizalofop-P-ethyl: Slightly mobile in soils

**12.5 Results of PBT and vPvB assessment**

**PBT and vPvB assessment** Quizalofop-P-ethyl: 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 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.

**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

14.2 Proper shipping name

**1993**FLAMMABLE LIQUID, N.O.S.  
(QUIZALOFOP-P-ETHYL, SOLVENT NAPHTHA  
(PETROLEUM) LIGHT AROMATIC SOLUTION)



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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. (QUIZALOFOP-P-ETHYL, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC SOLUTION)
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. (QUIZALOFOP-P-ETHYL, SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC 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.

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**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.

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

R10	Flammable.
R22	Harmful if swallowed.
R36/38	Irritating to eyes and skin.
R37	Irritating to respiratory system.
R40	Limited evidence of a carcinogenic effect.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.



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- R51/53 Toxic 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

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.
- 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.

**Reason for Revision:** Section 12. Ecological information.

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