

Safety data sheet
according to the REACH Regulation (EC) 1907/2006 amended by
Regulation (EU) 2020/878

Printing date: 30.05.2024

Version number 3 (replaces version 2)

Revision: 30.05.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier**Trade name:** ZAMZAR**Formulation:** Emulsifiable concentrate - EC**Active ingredient:** Quizalofop-P-ethyl**Chemical family:** Aryloxyphenoxypropionate**CAS Number:** quizalofop-p-ethyl: 100646-51-3**UFI:** MG74-0NDX-K30F-17SQ**1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use** SU1 Agriculture, forestry, fishery**Product category** PC27 Plant protection products**Application of the substance / the mixture** Herbicides**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

GALENIKA-FITOFARMACIJA a.d.

Batajnicki drum bb

11080 Belgrade

tel: + 381 (11) 3072-301

fax: + 381 (11) 3072 310

e-mail: office@fitofarmacija.rs

1.4 Emergency telephone number:

National Toxicological Information Centre

University Hospital Bratislava

Limbová 5, 833 05 Bratislava, Slovakia

+421 911 166 066

ntic@ntic.sk

EMERGENCY TELEPHONE NUMBER

+421 2 5477 4166

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture**Classification according to Regulation (EC) No 1272/2008**

Skin Irrit. 2 H315 Causes skin irritation.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05

GHS07

GHS08

GHS09

Signal word Danger

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Hazard-determining components of labelling:

Hydrocarbons, C10, aromatics, <1% naphthalene

Quizalofop-p-ethyl

Calcium dodecylbenzene sulphonate, linear

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice.

P362 Take off contaminated clothing.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterisation: Substance Not applicable.**3.2 Mixtures****Dangerous components:**

EC number: 918-811-1	Hydrocarbons, C10, aromatics, <1% naphthalene Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H336	>60%
CAS: 100646-51-3	Quizalofop-p-ethyl Aquatic Acute 1, H400 (M=10); Aquatic Chronic 1, H410 (M=10); Acute Tox. 4, H302	5.5%

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EC number: 932-231-6	Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt Eye Dam. 1, H318; Skin Irrit. 2, H315; Aquatic Chronic 3, H412	< 5%
CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6	butan-1-ol Flam. Liq. 3, H226; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	≤ 1.5%
EC number: 918-668-5	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT SE 3, H335-H336	< 1%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

Have the product container, label or Safety Data Sheet with you when calling a poison control center or physician.

Take affected persons out of danger area.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact:

If skin irritation continues, consult a doctor.

Remove contaminated clothing and shoes.

Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

Remove contact lenses if possible.

After swallowing:

Rinse mouth with plenty of water. Call a doctor.

Never give an unconscious person anything to drink.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause respiratory irritation. Inhalation poisoning is accompanied by headache, drowsiness, dizziness, ataxia, and extreme weakness.

Skin contact: May cause skin irritation and an allergic reaction in sensitive persons.

Eye contact: Tearing, tingling, pain, redness. Causes serious eye damage.

Ingestion: Ingestion and diarrhea may occur when ingested in large quantities. Poisoning by ingestion accompanied by headache, dizziness, ataxia, and extreme weakness.

4.3 Indication of any immediate medical attention and special treatment needed

There is no specific antidote available. Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Foam, CO₂, dry extinguishing powder, water mist.

For safety reasons unsuitable extinguishing agents: Water with full jet

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Nitrogen oxides (NO_x)

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5.3 Advice for firefighters*Use self-contained breathing apparatus and protective clothing.**Wear full protective clothing and self-contained breathing apparatus.***Protective equipment:** *Wear self-contained breathing apparatus and complete personal protective equipment.***SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures***Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.**Wear protective equipment. Keep unprotected persons away.***6.2 Environmental precautions:***Do not allow product to reach sewage system or any water course.**Inform respective authorities in case of seepage into water course or sewage system.**Dilute with plenty of water.**Do not allow to enter sewers/ surface or ground water.***6.3 Methods and material for containment and cleaning up:***Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).**Dispose contaminated material as waste according to section 13.**Ensure adequate ventilation.***6.4 Reference to other sections***See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.***SECTION 7: Handling and storage****7.1 Precautions for safe handling***Ensure good ventilation/exhaustion at the workplace.**Avoid inhalation and contact with skin and eyes. Wear protective clothing and protective equipment for eyes and face. Do not eat, drink or smoke. After handling wash hands and face with soap and water. Wash contaminated clothing.***Information about fire - and explosion protection:***Keep ignition sources away - Do not smoke.**Protect against electrostatic charges.***7.2 Conditions for safe storage, including any incompatibilities****Storage:***Keep in a cool, dry place in tightly closed original containers. Keep away from foodstuffs, beverages and feed.**Keep away from children.***Requirements to be met by storerooms and receptacles:** *Store in a cool and dry, in the original packaging.***Information about storage in one common storage facility:** *Store away from foodstuffs.***Further information about storage conditions:** *Keep container tightly sealed.***7.3 Specific end use(s)** *Use this product only for plant protection.*

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters**Ingredients with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Appropriate engineering controls No further data; see section 7.

Individual protection measures, such as personal protective equipment**General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Hand protection

Protective gloves

Material of gloves The selection of suitable gloves in accordance to EN 374.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye/face protection

Tightly sealed goggles

Body protection:

Protective suit Use chemical resistant protective suit.

Environmental exposure controls Do not allow to get into the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**General Information**

Physical state	Liquid
Colour:	Light yellow
Odour:	Characteristic
Odour threshold:	Not determined.
Melting point/freezing point:	Not determined.
Boiling point or initial boiling point and boiling range	138.5 – 144 °C
Flammability	No data available.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	61 °C

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Auto-ignition temperature:	Undetermined.
Decomposition temperature:	Not determined.
pH	5.72 (CIPAC MT 75)
Viscosity:	Data lacking.
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure:	Not determined.
Density and/or relative density	
Density:	Not determined.
Relative density at 20 °C	0.914
Vapour density	Not determined.
9.2 Other information	
Form:	Liquid
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Crystallisation temperature / range:	
Oxidising properties	Data lacking.
Evaporation rate	Not determined.
9.2.1. Information with regard to physical hazard classes	
Explosives	Not applicable.
Flammable gases	Not applicable.
Aerosols	Not applicable.
Oxidising gases	Not applicable.
Gases under pressure	Not applicable.
Flammable liquids	Not applicable.
Flammable solids	Not applicable.
Self-reactive substances and mixtures	Not applicable.
Pyrophoric liquids	Not applicable.
Pyrophoric solids	Not applicable.
Self-heating substances and mixtures	Not applicable.
Substances and mixtures, which emit flammable gases	
in contact with water	Not applicable.
Oxidising liquids	Not applicable.
Oxidising solids	Not applicable.
Organic peroxides	Not applicable.
Corrosive to metals	Not applicable.
Desensitised explosives	Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability Stable under normal handling and storage conditions.

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

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10.3 Possibility of hazardous reactions No dangerous reactions known.**10.4 Conditions to avoid**

Keep out of direct sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials:

Acids and bases.

Strong oxidizing agents

10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC50 values relevant for classification:**CAS: 100646-51-3 Quizalofop-p-ethyl**

Oral	LD50	1.182 mg/kg (Rat)
Dermal	LD50	>2,000 mg/kg (Rat)
Inhalative	LC50/4 h	>5.8 mg/l (Rat)

Skin corrosion/irritation: Causes skin irritation.**Serious eye damage/eye irritation:** Causes serious eye damage.**Respiratory or skin sensitisation:** May cause an allergic skin reaction.**Germ cell mutagenicity** Based on available data, the classification criteria are not met.**Carcinogenicity** Based on available data, the classification criteria are not met.**Reproductive toxicity** Based on available data, the classification criteria are not met.**STOT-single exposure** May cause respiratory irritation. May cause drowsiness or dizziness.**STOT-repeated exposure** Based on available data, the classification criteria are not met.**Aspiration hazard** May be fatal if swallowed and enters airways.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity**Aquatic toxicity:****CAS: 100646-51-3 Quizalofop-p-ethyl**

EC50	0.29 mg/l (Daphnia magna)
LC50	0.21 mg/l (Fish)

12.2 Persistence and degradability Quizalofop-p-ethyl is considered as non-persistent.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** Quizalofop-p-ethyl is considered as slightly mobile in soil.**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.

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12.7 Other adverse effects
Remark: Quizalofop-p-ethyl is very toxic to aquatic organisms.

Toxicity to honey bees:
CAS: 100646-51-3 Quizalofop-p-ethyl

 Oral LD50 (48 h) > 100 µg/bee (*Apis mellifera*)

 Dermal LD50 (48 h) > 100 µg/bee (*Apis mellifera*)

Additional ecological information:
General notes:

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Waste disposal key:

15 01 10* packaging containing residues of or contaminated by dangerous substances

02 01 08* agrochemical waste containing dangerous substances

Uncleaned packaging:
Recommendation: Disposal must be made according to national official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

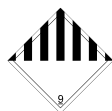
14.1 UN number or ID number
ADR/RID/ADN, IMDG, IATA UN3082

14.2 UN proper shipping name
ADR/RID/ADN, IMDG, IATA 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quizalofop-p-ethyl)

14.3 Transport hazard class(es)
ADR/RID/ADN, IATA

Class 9 Miscellaneous dangerous substances and articles.

Label 9

IMDG

Class 9 Miscellaneous dangerous substances and articles.

Label 9

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14.4 Packing group
ADR/RID/ADN, IMDG, IATA

III

14.5 Environmental hazards:

Product contains environmentally hazardous substances:

Quizalofop-p-ethyl

Special marking (ADR/RID/ADN):

Symbol (fish and tree)

Special marking (IATA):

Symbol (fish and tree)

14.6 Special precautions for user

Warning: Miscellaneous dangerous substances and articles.

Hazard identification number (Kemler code):

90

EMS Number:

F-A,S-F

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:
ADR/RID/ADN
Transport category

3

Tunnel restriction code

-

Remarks:

Exempted from ADR+LQ (UN3077+ 3082 Class 9) according to extra provision ADR SV375 as of 01.01.15. "375. These substances when carried in single or combination packaging containing net quantity per single or inner packaging of 5 lit or less for liquids having a nett mass per single or inner packaging of 5KG or less for solids, are not subject to any other provisions."

UN "Model Regulation":

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (QUIZALOFOP-P-ETHYL), 9, III

SECTION 15: Regulatory information

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

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

REGULATION (EU) 2019/1148
Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

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Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

* **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Hazard phrases:

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H318 Causes serious eye damage.

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.

Date of previous version: 09.01.2023

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Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3