



Safety Data Sheet
BIOALPHA

Safety Data Sheet dated 30/6/2020, version 20

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

1.1. Product identifier

Mixture identification:

Trade name: BIOALPHA

Trade code: 860202010PP

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

Identified use:

Concentrated bio-conditioner for water and water systems

Uses advised against:

Any other use different from the identified uses.

1.3. Details of the supplier of the safety data sheet

Company:

BARCHEMICALS SRL

VIA S.ALLENDE 14

CASTELNUOVO RANGONE (MO)

ITALY

PHONE. +39 059/536502

FAX. +39 059/536742

www.barchemicals.it

Competent person responsible for the safety data sheet:

barani.corrado@barchemicals.it


1.4. Emergency telephone number

Barani Dr.Corrado - MOBILE PHONE. +39 335/6109383

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)

 Warning, Eye Irrit. 2, Causes serious eye irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash hands thoroughly after handling.

P280 Wear protective gloves and eye/face protection.

P337+P313 If eye irritation persists: Get medical advice/attention.

Special Provisions:

None

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Special provisions according to Annex XVII of REACH and subsequent amendments:
None


2.3. Other hazards
vPvB Substances: None - PBT Substances: None
Other Hazards:
No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances
N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
>= 30% - < 40%	Citric acid monohydrate	CAS: 5949-29-1 EC: 201-069-1 REACH No.: 01- 2119457026- 42	 3.3/2 Eye Irrit. 2 H319

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Rinse well your mouth

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

In case of breathing difficult, bring the injured person into the open air and store it in a comfortable position for breathing. Consult a physician.

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

After contact with the eyes produces redness and pain.

Contact with the skin produces redness, burning and pain.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

In case of contact with eyes, rinse immediately for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

After contact with skin, wash immediately with plenty of soap and water.

If swallowed, rinse mouth. Consult a doctor as soon as possible.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

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Full jet water.

Water spray, heavy alcohol foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Immediately isolate the area by removing all persons from the area of the accident in the event of a fire. No action shall be taken involving any personal risk or without proper training. Firefighters must wear protective equipment and self-contained breathing apparatus (SCBA) with a full-face mask on the working face at positive pressure. Fire extinguishers (including helmets, protective boots and gloves) conforming to European Standard EN469 will provide basic protection for chemical accidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove persons to safety.

Evacuate the surrounding areas.

Prevent entry of foreign and unprotected personnel.

Avoid breathing vapors or mists.

Provide adequate ventilation.

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

6.3. Methods and material for containment and cleaning up

In case of a liquid product, hold and absorb the spillage with inert absorbent material (eg, sand, earth, vermiculite, fossil flour). Store contaminated material in suitable containers and start waste disposal. After collection, rinse the area and the materials with water by retrieving the water used and, if necessary, dispose of it in authorized plants.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities

Store at room temperature in airtight containers in a dry and well-ventilated place.

Do not eat, drink or smoke at the workplace. Foods and beverages should be consumed only in areas specifically identified after removing contaminated clothing and protective equipment and after washing your hands. Wash in any case hands after handling the substance / mixture.

Keep away from food, drink and feed.

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- Incompatible materials:
None in particular.
Instructions as regards storage premises:
Adequately ventilated premises.
7.3. Specific end use(s)
See section 1.2.

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
No occupational exposure limit available
DNEL Exposure Limit Values
N.A.
PNEC Exposure Limit Values
Citric acid monohydrate - CAS: 5949-29-1
Target: Fresh Water - Value: 0.44 mg/l
Target: Marine water - Value: 0.044 mg/l
Target: Freshwater sediments - Value: 3.46 mg/kg
Target: Marine water sediments - Value: 34.6 mg/kg
Target: Soil (agricultural) - Value: 33.1 mg/kg
- 8.2. Exposure controls
Eye/face protection:
Eye glasses with side protection. EN166
Protection for skin:
Chemical protection clothing.
Protection for hands:
Rubber gloves.
Respiratory protection:
Not necessary in normal use.
Thermal Hazards:
Not applicable (the product is handled at room temperature)
Environmental exposure controls:
Do not allow the product to be absorbed from the soil or from entering waterways or sewers.
Do not let product enter drains. Discharge into the environment must be avoided.
Appropriate engineering controls:
Ensure adequate ventilation. Comply with the maximum concentration values in the workplace.

SECTION 9: Physical and chemical properties

- 9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes:
Appearance and colour:	Transparent liquid	--	--
Odour:	No odour	--	--
Odour threshold:	NA	--	--
pH:	2,5	--	--
Melting point / freezing point:	NA	--	--
Initial boiling point and boiling range:	NA	--	--
Flash point:	NA	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--

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Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	NA	--	--
Vapour density:	NA	--	--
Relative density:	1.12 Kg/l	--	--
Solubility in water:	Complete	--	--
Solubility in oil:	NA	--	--
Partition coefficient (n-octanol/water):	NA	--	--
Auto-ignition temperature:	NA	--	--
Decomposition temperature:	NA	--	--
Viscosity:	NA	--	--
Explosive properties:	Non explosive product	--	--
Oxidizing properties:	Non oxidizing product	--	--

9.2. Other information

Properties	Value	Method:	Notes:
Miscibility:	N.A.	--	--
Fat Solubility:	N.A.	--	--
Conductivity:	N.A.	--	--
Substance Groups relevant properties	N.A.	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under recommended storage and handling. Please refer to section 7 of the MSDS.

10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with dithiocarbamates, elementary metals (alkalis, alkaline earth, powder alloys or vapours) nitrides, and powerful reducing agents.

It may generate toxic gases on contact with dithiocarbamates, inorganic fluorides, inorganic sulphides, and powerful oxidising agents.

It may catch fire on contact with elementary metals (alkalis and alkaline earth).

10.4. Conditions to avoid

Avoid direct sunlight.

10.5. Incompatible materials

No one in particular.

10.6. Hazardous decomposition products

Carbon dioxide and carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the product:

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a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

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- Not classified
Based on available data, the classification criteria are not met
- c) serious eye damage/irritation
The product is classified: Eye Irrit. 2 H319
- d) respiratory or skin sensitisation
Not classified
Based on available data, the classification criteria are not met
- e) germ cell mutagenicity
Not classified
Based on available data, the classification criteria are not met
- f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met
- g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met
- h) STOT-single exposure
Not classified
Based on available data, the classification criteria are not met
- i) STOT-repeated exposure
Not classified
Based on available data, the classification criteria are not met
- j) aspiration hazard
Not classified
Based on available data, the classification criteria are not met
- Toxicological information of the main substances found in the product:
Citric acid monohydrate - CAS: 5949-29-1
- a) acute toxicity:
Test: LD50 - Route: Oral - Species: Mouse = 5400 mg/kg - Source: Study report 1981 (ECHA) - Notes: OECD Guideline 401
Test: LD50 - Route: Skin - Species: Rat > 2000 mg/kg - Source: Study report 2006 (ECHA) - Notes: OECD Guideline 402
- b) skin corrosion/irritation:
Test: Skin Irritant - Species: Rabbit No - Source: Study report 1990 (ECHA) - Notes: in vivo, OECD Guideline 404
- c) serious eye damage/irritation:
Test: Eye Irritant - Species: Rabbit Yes - Source: Carpenter et al. (1946)
- e) germ cell mutagenicity:
Test: Genotoxicity - Species: Rat No - Source: Study report 1975 - Notes: in vivo, OECD Guideline 475
- f) carcinogenicity:
Test: Carcinogenicity =
- g) reproductive toxicity:
Test: Reproductive Toxicity No - Source: Wright, Hughes 1976 (ECHA)

SECTION 12: Ecological information

12.1. Toxicity

No information is available on the mixture as a whole. This is the information on ecotoxicological effects of the individual components.

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Not classified for environmental hazards

Based on available data, the classification criteria are not met

Citric acid monohydrate - CAS: 5949-29-1

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- a) Aquatic acute toxicity:
Endpoint: LC50 - Species: Fish = 440 mg/l - Duration h: 96
Endpoint: LC50 - Species: Daphnia = 1535 mg/l - Duration h: 24 - Notes: ECHA
Endpoint: NOEC - Species: Algae = 425 mg/l - Notes: 8 d mat. (nominale) in base alla densità delle cellule
- 12.2. Persistence and degradability
Citric acid monohydrate - CAS: 5949-29-1
Biodegradability: Not persistent and Biodegradable - %: 667
- 12.3. Bioaccumulative potential
N.A.
- 12.4. Mobility in soil
N.A.
- 12.5. Results of PBT and vPvB assessment
vPvB Substances: None - PBT Substances: None
- 12.6. Other adverse effects
None

SECTION 13: Disposal considerations

- 13.1. Waste treatment methods
Recover if possible. In so doing, comply with the local and national regulations currently in force.
- Additional disposal information:
Retrieve if possible. Send to authorized disposal plants or incineration under controlled conditions. Work according to local and national regulations. Recover if possible. Send to authorized disposal plants or for incineration under controlled conditions. Operate according to local and national regulations.

SECTION 14: Transport information

- 14.1. UN number
Not classified as dangerous in the meaning of transport regulations.
- 14.2. UN proper shipping name
N.A.
- 14.3. Transport hazard class(es)
N.A.
- 14.4. Packing group
N.A.
- 14.5. Environmental hazards
ADR-Environmental Pollutant: No
IMDG-Marine pollutant: No
- 14.6. Special precautions for user
N.A.
- 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
N.A.

SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
Dir. 98/24/EC (Risks related to chemical agents at work)
Dir. 2000/39/EC (Occupational exposure limit values)
Regulation (EC) n. 1907/2006 (REACH)
Regulation (EC) n. 1272/2008 (CLP)
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013
Regulation (EU) 2015/830

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Regulation (EU) n. 286/2011 (ATP 2 CLP)
Regulation (EU) n. 618/2012 (ATP 3 CLP)
Regulation (EU) n. 487/2013 (ATP 4 CLP)
Regulation (EU) n. 944/2013 (ATP 5 CLP)
Regulation (EU) n. 605/2014 (ATP 6 CLP)
Regulation (EU) n. 2015/1221 (ATP 7 CLP)
Regulation (EU) n. 2016/918 (ATP 8 CLP)
Regulation (EU) n. 2016/1179 (ATP 9 CLP)
Regulation (EU) n. 2017/776 (ATP 10 CLP)
Regulation (EU) n. 2018/669 (ATP 11 CLP)
Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

None

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

None

SECTION 16: Other information

For professional use.

Full text of phrases referred to in Section 3:

H319 Causes serious eye irritation.

Hazard class and hazard category	Code	Description
Eye Irrit. 2	3.3/2	Eye irritation, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Eye Irrit. 2, H319	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities

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SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

Liability exclusion clause: The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

For professional use.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE:	Acute Toxicity Estimate
ATEmix:	Acute toxicity Estimate (Mixtures)
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GefStoffVO:	Ordinance on Hazardous Substances, Germany.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IATA:	International Air Transport Association.
IATA-DGR:	Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO:	International Civil Aviation Organization.
ICAO-TI:	Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.