

Safety Data Sheet BIOSAN



Safety Data Sheet dated 21/12/2016, version 2

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

1.1. Product identifier

Identification of the substance:

Trade name: **BIOSAN**

The transition time according to REACH Regulation, Article 23 is still not expired.

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

Identified use:

Product with a strong antibacterial effect and algae polymer based.

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

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

Antipoison Center - Hospital Name 2 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 3 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 4 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 5 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 6 - City - Telephone nbr.(availability information)


Antipoison Center - Hospital Name 7 - City - Telephone nbr. (availability information)

Antipoison Center - Hospital Name 8 - City - Telephone nbr. (availability information)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria n°1272/2008 (CLP)

 Warning, Aquatic Acute 1, Very toxic to aquatic life.

 Warning, Aquatic Chronic 1, Very toxic to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Warning

Hazard statements:

H302 Harmful if swallowed.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P270 Do not eat, drink or smoke during use.

P273 Avoid release to the environment.

P301+P312 IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell

P391 Collect spillage.

P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

None

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
>= 60% - < 70%	Methanamine, N-methyl-, polymer with 2-(chloromethyl)oxirane	CAS: 25988-97-0	 3.1/4/Oral Acute Tox. 4 H302  4.1/A1 Aquatic Acute 1 H400  4.1/C1 Aquatic Chronic 1 H410

<5% BIOPOLYMERS NATURAL
NOT DANGEROUS

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

In case of eyes contact:

immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Verify the presence of contact lenses and in that case, remove them. Continue to rinse for at least 20 minutes. Consult a physician if irritation occurs.

In case of Ingestion:

Chemical products for water treatment

Rinse mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If necessary, contact a poison control center or physician. Never give anything by mouth to an unconscious person.

In case of Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if irregular breathing or respiratory arrest, provide artificial respiration or oxygen by trained personnel. Perform mouth-to-mouth can be dangerous to the person providing aid. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Ensure good air circulation. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. You may need to keep the exposed person under medical surveillance for 48 hours.

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

Accidental ingestion may cause abdominal pain.

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

If d'incidente or complaints consult a doctor immediately (if possible show directions for use or safety data sheet).

Treatment:

nobody.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Hazards from the substance or mixture

In case of fire or if heated, a pressure increase will occur with the possibility of rupture of the container. This material is very toxic to aquatic life with long-term effects. Fire water contaminated with this material must be contained and must prevent access to any waterway, sewer or drain.

Hazardous combustion products

Decomposition products may include the following materials:

carbon dioxide

carbon monoxide

nitrogen oxides

halogenated compounds

5.3. Advice for firefighters

Promptly isolate the scene by removing all persons in the vicinity in case of fire. No action shall be taken involving any personal risk or without suitable training.

The tomore firefighters wearing protective equipment and breathing apparatus (SCBA) with a full face-piece operated in positive pressure. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN469 provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate surrounding areas. Prevent unnecessary and unprotected personnel. Do not touch or walk through spilled material. Avoid breathing vapors or mists. Provide adequate ventilation.

Wear appropriate respirator. Wear appropriate personal protective equipment.

See protective measures under point 7 and 8.

Chemical products for water treatment

6.2. Environmental precautions

Allow to enter into soil / subsoil. Prevent spills into surface water or sanitary sewer system.
Retain contaminated washing water and discard.
In case of seepage into waterways, soil or drains, inform the responsible authorities.
Suitable material for taking up: absorbing material, sand.

6.3. Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach release from upwind.
Prevent entry into sewers, water courses, basements or confined areas. Wash and channel the amount spilled in a treatment plant discharges or proceed as follows. Contain and collect spillage with non- combustible absorbent material, such as sand, earth, vermiculite, diatomaceous earth and disposal of the product in a container in accordance with local regulations. Dispose of via a licensed waste disposal company. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4. Reference to other sections

For emergency contact numbers see Section 1.
See Section 8 for information on appropriate personal protective equipment.
For more information on the treatment of waste, refer to Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Wear appropriate personal protective equipment (see Section 8). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. To disperse. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store in the original container kept closed when not in use. Do not reuse container.

7.2. Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and beverages. Keep container tightly closed and sealed until ready to use. Opened containers should be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers.

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.

Incompatible materials:

None in particular. See also paragraph 10 below.

7.3. Specific end use(s)

None in particular

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

N.A.

8.2. Exposure controls

Eye / face protection:

safety glasses with side protection for chemicals (EN 166).

Skin protection:

Clothing for exposure to chemicals.

Hand protection:

Gloves resistant to chemicals EN 374 (nitrile, neoprene, PVC polyvinyl chloride, butyl rubber).

Respiratory protection:

Not necessary in normal use.

Thermal Hazards:

Chemical products for water treatment

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:	Liquido viscoso giallo	--	--
Odour:	N.A.	--	--
Odour threshold:	N.A.	--	--
pH:	6	--	--
Melting point / freezing point:	N.A.	--	--
Initial boiling point and boiling range:	100°C	--	--
Flash point:	N.A.	--	--
Evaporation rate:	N.A.	--	--
Solid/gas flammability:	N.A.	--	--
Upper/lower flammability or explosive limits:	N.A.	--	--
Vapour pressure:	N.A.	--	--
Vapour density:	N.A.	--	--
Relative density:	1.15 a 25°C	--	--
Solubility in water:	Completa	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient (n-octanol/water):	-3,13	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
Viscosity:	N.A.	--	--
Explosive properties:	N.A.	--	--
Oxidizing properties:	N.A.	--	--

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.

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 Iscr. Trib. di Modena n° 27444

Chemical products for water treatment

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Keep away from heat sources.

10.5. Incompatible materials

No one in particular.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, should be no hazardous decomposition products.

Hazardous combustion products: See section 5.2 of the SDS.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane - CAS: 25988-97-0

a) acute toxicity:

Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

Test: LD50 - Route: Oral - Species: Rat = 1672 mg/kg

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

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.

Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane - CAS: 25988-97-0

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Algae = 0.09 mg/l - Duration h: 72

Endpoint: EC50 - Species: Daphnia = 0.14 mg/l - Duration h: 48

Endpoint: LC50 - Species: Fish = 0.077 mg/l - Duration h: 96

12.2. Persistence and degradability

N.A.

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

The generation of waste should be avoided or minimized wherever possible. Incineration or landfill should only be considered when recycling is not feasible.

Dispose of this material and its container must be with proper precautions. Care should be taken when handling emptied containers that have not been cleaned or rinsed out.

Empty containers or liners may retain some product residues. Prevent drift and runoff of spilled material and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information



14.1. UN number

ADR-UN Number: 3082

IATA-UN Number: 3082

IMDG-UN Number: 3082

14.2. UN proper shipping name

ADR-Shipping Name: 3082.3082-III (Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane)

IATA-Shipping Name: 3082.3082-III (Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane)

IMDG-Shipping Name: 3082.3082-III (Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane)

14.3. Transport hazard class(es)

ADR-Class: 9

ADR - Hazard identification number: 90

IATA-Class: 9

IATA-Label: 9

IMDG-Class: 9

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

ADR-Environmental Pollutant: Yes

IMDG-Marine pollutant: Marine Pollutant

Most important toxic component: Methanamine, N-methyl-,polymer with 2-(chloromethyl)oxirane

14.6. Special precautions for user

ADR-Subsidiary risks: -

ADR-S.P.: 274 335 601

ADR-Tunnel Restriction Code: 3 (E)

IATA-Passenger Aircraft: 964

IATA-Subsidiary risks: -

IATA-Cargo Aircraft: 964

IATA-S.P.: A97 A158

IATA-ERG: 9L

IMDG-EmS: F-A , S-F

IMDG-Subsidiary risks: -

Chemical products for water treatment

IMDG-Storage category: Category A

IMDG-Storage notes: -

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

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)

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 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

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

1999/13/EC (VOC directive)

15.2. Chemical safety assessment

No

SECTION 16: Other information

For professional use

This document was drawn up by a competent technician in the field of person who has received appropriate training.

Relevant phrases (number and full text as shown in chapters 2 and 3):

H302 Harmful if swallowed.

H400 Very toxic to aquatic organisms.

H410 Very toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

ADR: European Agreement concerning the international road transport of dangerous goods.

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 European.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

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Chemical products for water treatment

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical "International Civil Aviation Organization Instructions" (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.
LTE: long-term exposure.
PNEC: Predicted No Effect Concentration.
RID: Regulation Concerning the International Carriage of Dangerous Goods by Rail.
STE: Short term exposure.
STEL: Short Term Exposure Limit.
STOT: Specific Target Organ Toxicity.
TLV: TLV.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hours. (ACGIH Standard).
WGK: Water Hazard Class (Germany).

Key literature references and sources for data:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand
Reinold
Negotiable - Annex 1
National Institute of Health - National Chemicals Inventory

Paragraphs modified from the previous revision:

Section 1.1 and 1.2, section 2.1 and 2.2, Section 3.2, Section 4, Section 5.2 and 5.3, section 6, section 7.1 and 7.2, section 8.2, section 10, section 12.2 and 12.3, section 13.1, section 14, section 15.1, section 16.

Exclusion of liability clause

The information contained herein is based on our knowledge as of the date indicated. They refer solely to the product indicated and constitutes no guarantee of particular quality.
The user must verify the suitability and completeness of such information in relation to the specific use intended.
This sheet supersedes any previous edition.