Safety Data Sheet dated 13/10/2025, version 2

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

1.1. Product identifier

Mixture identification:

Trade name: Biologicut

Trade code: CB 978 (5005)

UFI: 5S30-702R-X00T-S94N

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

Recommended use:

Additive for cleansing and maintaining plasma equipment

PROFESSIONAL USE.

Uses advised against:

Do not use for purposes other than those listed.

1.3. Details of the supplier of the safety data sheet

Company:

F.I.D. s.r.l

Via Circonvallazione, 6

47030 San Mauro Pascoli – (FC) - ITALIA

Tel. +39 0541 933416 - Fax +39 0541 932903

Competent person responsible for the safety data sheet:

info@gutchemical.it

1.4. Emergency telephone number

Poison centers (h24):

Ospedale Niguarda Ca' Granda di Milano Tel. +39 02 66101029.

Ospedale Pediatrico Bambino Gesù di Roma Tel. +39 06 68593726

Az. Osp. Univ. Di Foggia Tel. +39 800183459

Az. Osp. A. Cardarelli di Napoli Tel. +39 081-5453333

Policlinico Umberto I di Roma Tel. +39 06 49978000

Policlinico A. Gemelli di Roma Tel. +39 06 3054343

Az. Osp. Careggi U.O. Tossicologia Medica di Firenze Tel. +39 055 7947819

Centro Nazionale di Informazione Tossicologica di Pavia Tel. +39 0382 24444

Azienda Ospedaliera Papa Giovanni XXII di Bergamo Tel. +39 800883300

Azienda Ospedaliera Integrata Verona Tel. +39 800011858

Poison centres of Europe Member States: https://poisoncentres.echa.europa.eu/appointed-bodies

Poison centres of WHO Member States: http://www.who.int/gho/phe/chemical_safety/poisons_centres/en/

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

Eye Dam. 1, H318 Causes serious eye damage.

Aquatic Chronic 3, H412 Harmful to aquatic life with long lasting effects.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Hazard pictograms:



Danger

Hazard statements:

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P273 Avoid release to the environment.

P280 Wear protective gloves and eye/face 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.

P310 Immediately call a POISON CENTER or a doctor

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

Special Provisions:

EUH208 Contains (R)-p-mentha-1,8-diene; d-limonene. May produce an allergic reaction.

Contains

Isotridecanol, ethoxylated

2,2'-iminodiethanol; diethanolamine

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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

Qty	Name	Ident. Number		Classification
4 - 5 %	Isotridecanol, ethoxylated	CAS: EC:	69011-36-5 953-750-4	3.1/4/Oral Acute Tox. 4 H302 3.3/1 Eye Dam. 1 H318 Acute Toxicity Estimate: ATE - Oral 500 mg/kg bw
10.5 - 1.5 %	2,2'-iminodiethanol; diethanolamine	Index number: CAS: EC: REACH No.:	603-071-00-1 111-42-2 203-868-0 01-2119488930-28	3.1/4/Oral Acute Tox. 4 H302 3.2/2 Skin Irrit. 2 H315 3.3/1 Eye Dam. 1 H318 3.9/2 STOT RE 2 H373
0.193 %	(R)-p-mentha-1,8-diene; d-limonene	Index number: CAS: EC: REACH No.:	601-096-00-2 5989-27-5 227-813-5 01-2119529223-47	2.6/3 Flam. Liq. 3 H226 3.10/1 Asp. Tox. 1 H304 3.2/2 Skin Irrit. 2 H315 3.4.2/1 Skin Sens. 1 H317 4.1/A1 Aquatic Acute 1 H400 M=1. 4.1/C3 Aquatic Chronic 3 H412

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing and wash it before reuse.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

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 opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

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.

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

No data available for the mixture. See section 11 for symptoms and effects of the substances.

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:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray jets, CO2, dry chemical, foam.

Extinguishing media which must not be used for safety reasons:

Water jets.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

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.

Retain contaminated washing water and dispose it.

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

Wash with plenty of water.

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.

Do not eat, drink or smoke while working.

Advice on general occupational hygiene:

Contamined clothing should be changed before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Protect from frost.

Keep away from food, drink and feed.

Incompatible materials:

See subsection 10.5

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

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

- OEL Type: ACGIH - TWA(8h): 1 mg/m3 - Notes: Skin - Liver and kidney dam

DNEL Exposure Limit Values

Not applicable

PNEC Exposure Limit Values

Not applicable

8.2. Exposure controls

Eye protection:

Wear safety goggles with side shields (EN 166).

Protection for skin:

Wear clothing that guarantees total protection for the skin, e.g. in cotton, rubber, PVC or viton.

Protection for hands:

Protective gloves resistant to chemicals (standard EN 374-1). They should be replaced regularly and if there is any

indication of degradation or chemical breakthrough.

Respiratory protection:

Under normal conditions of use no special precautions are required.

Thermal Hazards:

None

Environmental exposure controls:

See section 7 and 13.

Appropriate engineering controls:

Ensure adequate ventilation of the premises.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	**Value**	**Method:**	**Notes**
Physical state:	Liquid	--	--
Colour:	Blue	--	--
Odour:	Not applicable	--	--
Melting point/freezing point:	Not applicable	--	--
Boiling point or initial boiling point and boiling range:	100°C	--	--
Flammability:	Non-flammable	--	--
Lower and upper explosion limit:	Not Relevant	--	--
Flash point:	> 100 ° C	--	--
Auto-ignition temperature:	Not Relevant	--	--
Decomposition temperature:	Not Relevant	--	--
pH:	10	--	Sol. 5 %

Kinematic viscosity:	Not Relevant	--	--
Solubility in water:	Soluble	--	--
Solubility in oil:	Not Relevant	--	--
Partition coefficient n-octanol/water (log value):	Not applicable	--	Product is a mixture
Vapour pressure:	Not Relevant	--	--
Density and/or relative density:	1.05 g/cm3 (20°C)	--	--
Relative vapour density:	Not Relevant	--	--

Particle characteristics:

Particle size:	Not applicable	--	--

9.2. Other information

Properties	**Value**	**Method:**	**Notes**
Explosive properties:	not explosive	--	--
Oxidizing properties:	not oxidant	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

In case of fire or decomposition may spread gas and vapors potentially harmful for health as CO2, carbon mono-oxide and other irritating fumes.

SECTION 11: Toxicological information

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

Toxicological information of the product:

a) acute toxicity

Not classified

Based on available data, the classification criteria are not met

b) skin corrosion/irritation

Not classified

Based on available data, the classification criteria are not met

c) serious eye damage/irritation

The product is classified: Eye Dam. 1 H318

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:

Isotridecanol, ethoxylated - CAS: 69011-36-5

a) acute toxicity

ATE - Oral 500 mg/kg bw

Test: LD50 - Route: Oral - Species: Rat = 500 mg/kg - Source: fornitore

Test: LD50 - Route: Skin - Species: Rat = 2000 mg/kg - Source: fornitore

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

a) acute toxicity:

Test: LD50 - Route: Inhalation - Species: Rat = 0.2 mg/l - Duration: 8h - Source: fornitore

Test: LD50 - Route: Oral - Species: Rat = 1600 mg/kg bw/day - Source: fornitore

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg - Source: fornitore

Test: LD50 - Route: Oral - Species: Rat = 4400 mg/kg - Source: fornitore

Test: LD50 - Route: Oral - Species: Mouse > 5000 mg/kg - Source: fornitore

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

The product is classified: Aquatic Chronic 3 - H412

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

a) Aquatic acute toxicity:

Endpoint: EC50 - Species: Daphnia magna = 55 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae (Pseudokirchneriella subcapitata) = 2.2 mg/l - Duration h: 96

Endpoint: LC50 - Species: Fish (Pimephales promelas) = 1460 mg/l - Duration h: 96

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish (Pimephales promelas) = 0.72 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia magna = 0.307 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae (Pseudokirchneriella subcapitata) = 0.32 mg/l - Duration h: 72

Endpoint: EC10 - Species: Algae (Pseudokirchneriella subcapitata) = 0.174 mg/l

12.2. Persistence and degradability

2,2'-iminodiethanol; diethanolamine - CAS: 111-42-2

Biodegradability: Readily biodegradable

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5

Biodegradability: 33 - Test: OECD 301B

12.3. Bioaccumulative potential

(R)-p-mentha-1,8-diene; d-limonene - CAS: 5989-27-5

Not bioaccumulative

12.4. Mobility in soil

Not applicable

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine disrupting properties

12.7. Other adverse effects

None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

Additional disposal information:

Reuse if possible. Product residues are to be considered special hazardous waste. The dangerousness of the waste that partially contains this product must be assessed on the basis of the laws in force.

Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations.

The transport of waste can be subject to ADR.

SECTION 14: Transport information

14.1. UN number or ID number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

ADR-Enviromental Pollutant: No

IMDG-Marine pollutant: No

14.6. Special precautions for user

Not applicable

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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) n. 2020/878

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)
Regulation (EU) n. 2019/521 (ATP 12 CLP)
Regulation (EU) n. 2020/217 (ATP 14 CLP)
Regulation (EU) n. 2020/1182 (ATP 15 CLP)
Regulation (EU) n. 2021/643 (ATP 16 CLP)
Regulation (EU) n. 2021/849 (ATP 17 CLP)
Regulation (EU) n. 2022/692 (ATP 18 CLP)
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2023/707
Regulation (EU) n. 2023/1434 (ATP 19 CLP)
Regulation (EU) n. 2023/1435 (ATP 20 CLP)
Regulation (EU) n. 2024/197 (ATP 21 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:

Restriction 40
Restriction 75

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.

SECTION 16: Other information

Full text of phrases referred to in Section 3:

H302 Harmful if swallowed.
H318 Causes serious eye damage.
H315 Causes skin irritation.
H373 May cause damage to organs through prolonged or repeated exposure.
H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Hazard class and hazard category	Code	Description
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Acute Tox. 4	3.1/4/Oral	Acute toxicity (oral), Category 4
Asp. Tox. 1	3.10/1	Aspiration hazard, Category 1
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Skin Sens. 1	3.4.2/1	Skin Sensitisation, Category 1
STOT RE 2	3.9/2	Specific target organ toxicity - repeated exposure, Category 2
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1

Aquatic Chronic 3	4.1/C3	Chronic (long term) aquatic hazard, category 3

Paragraphs modified from the previous revision:

SECTION 1: Identification of the substance/mixture and of the company/undertaking
SECTION 2: Hazards identification
SECTION 3: Composition/information on ingredients
SECTION 7: Handling and storage
SECTION 8: Exposure controls/personal protection
SECTION 9: Physical and chemical properties
SECTION 10: Stability and reactivity
SECTION 11: Toxicological information
SECTION 12: Ecological information
SECTION 13: Disposal considerations
SECTION 15: Regulatory information
SECTION 16: Other information

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 Dam. 1, H318	Calculation method
Aquatic Chronic 3, H412	Calculation method

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

Main bibliographic sources:

ECHA website: https://echa.europa.eu/home

IFA GESTIS website: https://limitvalue.ifa.dguv.de

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

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.

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.