Material Safety Data Sheet Cover-Sheet – This page provides additional New Zealand specific information for this product and must be read in conjunction with the Safety Data Sheet (SDS) attached

Product Name:	Bluem oral gel
Manufacturer:	Bluem Europe
SDS Expiry:	21 February 2029
Supplier Details:	Healthcare Essentials Level 4/15 College Str Te Aro, Wellington 6011 New Zealand www.healthcareessentials.nz
Emergency Contacts:	Poisons/Hazardous Chemical Info Centre – 0800POISON/0800764766 (24 Hours) Phone 111 for Fire, Ambulance or Police
HSNO Class/Category:	3.1C, 6.4C, 6.8A
HSNO Group Standard:	Dental Products Flammable Group Standard 2020 HSR002556
Statements/Pictograms:	As per attached Safety Data Sheet (SDS)
Date Prepared:	This coversheet was prepared – October 2026

This SDS coversheet has been produced by Healthcare Essentials and has been prepared in accordance with NZ EPA advice on making overseas SDS compliant to HSNO Act. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specifications of the product. Users must satisfy that the product is entirely suitable for their purpose. The SDS and this coversheet may be revised from time to time, please ensure you have a current copy.

Safety Data Sheet

acc. to GB/T 17519

Bluem oral gel

Version number: 2.1
Replaces version of:

Revision: 21.02.2024

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

1.1 Product identifier

Trade name **Bluem oral gel**

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

Relevant identified uses: Industrial use

Uses advised against: Do not use for private purposes (household)

1.3 Details of the supplier of the safety data sheet

Bluem Europe
Grote Voort 247
8041 BL Zwolle
Netherlands

Telephone: +31 (0)85 303 11 49
e-mail: info@bluemcare.com
Website: www.bluemcare.com

e-mail (competent person): info@bluemcare.com

1.4 Emergency telephone number

Emergency information service: +31 (0)85 303 11 49
This number is only available during the following office hours: Mon-Fri 09:00 - 17:00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard state-ment
2.6	flammable liquid	3	Flam. Liq. 3	H226
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.7	reproductive toxicity	1B	Repr. 1B	H360

For full text of H-phrases: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labelling

- signal word: Danger

- pictograms

GHS02, GHS07, GHS08



- hazard statements

H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H360 May damage fertility or the unborn child.

- precautionary statements

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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+P313	IF exposed or concerned: Get medical advice/ attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

- hazardous ingredients for labelling

Contains: sodium peroxoborate.

2.3 Other hazards

Special danger of slipping by leaking/spilling product.

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of ≥ 0,1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0,1%.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Ethanol	CAS No 64-17-5	10 – < 25	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319		
Glycerol	CAS No 56-81-5	10 – < 25	Acute Tox. 5 / H333		
Silica (silicon dioxide containing crystalline and amorphous)	CAS No 112945-52-5	5 – < 10	Acute Tox. 5 / H313 Acute Tox. 5 / H333		
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	CAS No 128-44-9	1 – < 2,5	Aquatic Acute 3 / H402		

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
sodium peroxoborate	CAS No 11138-47-9	1 – < 2,5	Ox. Sol. 2 / H272 Acute Tox. 4 / H302 Acute Tox. 5 / H313 Eye Dam. 1 / H318 Repr. 1B / H360 STOT SE 3 / H335 Aquatic Acute 2 / H401		
Citric acid	CAS No 77-92-9 5949-29-1	1 – < 2,5	Acute Tox. 5 / H313 Eye Irrit. 2 / H319 STOT SE 3 / H335		
Polyethylene glycol	CAS No 25322-68-3	1 – < 2,5	Acute Tox. 5 / H303 Acute Tox. 5 / H313		

Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor.

Following ingestion

Rinse mouth with water (only if the person is conscious). Call a POISON CENTER or doctor if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam; Dry extinguishing powder; Carbon dioxide (CO2);
Co-ordinate firefighting measures to the fire surroundings.

Unsuitable extinguishing media

Water jet.

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

During fire hazardous fumes/smoke could be produced. Carbon monoxide (CO). Carbon dioxide (CO2).

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

Self-contained breathing apparatus (SCBA). Standard protective clothing for firefighters.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Absorb with liquid-binding material (sand, diatomite, diatomaceous earth, acid binder, universal binder, sawdust).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- flammability hazards

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

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight. Frost.

Consideration of other advice

Store in a well-ventilated place. Keep container tightly closed.

- ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

There is no additional information.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Notation	Source
CN	silica	7631-86-9	OEL		1,5			dust, cond	GBZ 2.1
CN	silica	7631-86-9	OEL		0,5			r, cond	GBZ 2.1

Notation

cond	condensed silica
dust	as dust
r	respirable fraction
STEL	short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)
TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Ethanol	64-17-5	DNEL	1.900 mg/m³	human, inhalatory	worker (industry)	acute - local effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Ethanol	64-17-5	DNEL	950 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Ethanol	64-17-5	DNEL	343 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Ethanol	64-17-5	DNEL	114 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Ethanol	64-17-5	DNEL	206 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Ethanol	64-17-5	DNEL	87 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Glycerol	56-81-5	DNEL	56 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
Glycerol	56-81-5	DNEL	33 mg/m³	human, inhalatory	consumer (private households)	chronic - local effects
Glycerol	56-81-5	DNEL	229 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	DNEL	1,4 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	DNEL	0,4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	DNEL	0,25 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	DNEL	0,143 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	DNEL	0,143 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
sodium peroxoborate	11138-47-9	DNEL	2 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
sodium peroxoborate	11138-47-9	DNEL	2 mg/m³	human, inhalatory	worker (industry)	chronic - local effects
sodium peroxoborate	11138-47-9	DNEL	101 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
sodium peroxoborate	11138-47-9	DNEL	0,5 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
sodium peroxoborate	11138-47-9	DNEL	0,5 mg/m³	human, inhalatory	consumer (private households)	chronic - local effects
sodium peroxoborate	11138-47-9	DNEL	36 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
sodium peroxoborate	11138-47-9	DNEL	0,36 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects
Polyethylene glycol	25322-68-3	DNEL	40,2 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects

Relevant DNELs of components of the mixture

Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
Polyethylene glycol	25322-68-3	DNEL	112 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Polyethylene glycol	25322-68-3	DNEL	7,14 mg/m³	human, inhalatory	consumer (private households)	chronic - systemic effects
Polyethylene glycol	25322-68-3	DNEL	40 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects
Polyethylene glycol	25322-68-3	DNEL	40 mg/kg bw/day	human, oral	consumer (private households)	chronic - systemic effects

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
Ethanol	64-17-5	PNEC	2,75 mg/l	aquatic organisms	water	intermittent release
Ethanol	64-17-5	PNEC	0,96 mg/l	aquatic organisms	freshwater	short-term (single instance)
Ethanol	64-17-5	PNEC	0,79 mg/l	aquatic organisms	marine water	short-term (single instance)
Ethanol	64-17-5	PNEC	580 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Ethanol	64-17-5	PNEC	3,6 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Ethanol	64-17-5	PNEC	2,9 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Ethanol	64-17-5	PNEC	0,63 mg/kg	terrestrial organisms	soil	short-term (single instance)
Glycerol	56-81-5	PNEC	8,85 mg/l	aquatic organisms	water	intermittent release
Glycerol	56-81-5	PNEC	0,885 mg/l	aquatic organisms	freshwater	short-term (single instance)
Glycerol	56-81-5	PNEC	0,088 mg/l	aquatic organisms	marine water	short-term (single instance)
Glycerol	56-81-5	PNEC	1.000 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Glycerol	56-81-5	PNEC	3,3 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Glycerol	56-81-5	PNEC	0,33 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Glycerol	56-81-5	PNEC	0,141 mg/kg	terrestrial organisms	soil	short-term (single instance)
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	PNEC	10 mg/l	aquatic organisms	freshwater	short-term (single instance)
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	PNEC	1 mg/l	aquatic organisms	marine water	short-term (single instance)

Relevant PNECs of components

Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	PNEC	2.060 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	PNEC	206 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	PNEC	407 mg/kg	terrestrial organisms	soil	short-term (single instance)
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
Polyethylene glycol	25322-68-3	PNEC	0,273 g/l	aquatic organisms	freshwater	short-term (single instance)
Polyethylene glycol	25322-68-3	PNEC	27,3 mg/l	aquatic organisms	marine water	short-term (single instance)
Polyethylene glycol	25322-68-3	PNEC	1.030 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
Polyethylene glycol	25322-68-3	PNEC	103 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
Polyethylene glycol	25322-68-3	PNEC	46,4 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

Individual protection measures (personal protective equipment)

Eye/face protection



Use safety goggle with side protection

Skin protection



Chemical protective clothing.

Hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- type of material

PVC: polyvinyl chloride

- material thickness

Use gloves with a minimum material thickness: ≥ 0.38 mm.

- breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).

- other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Type: ABEK-P2 (combined filters against gases, vapours and particles, colour code: Brown/Grey/Yellow/Green/White).

Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid (gel)
Colour	milky-white
Particle	not relevant (liquid)
Odour	neutral

Other safety parameters

pH (value)	6 – 6,5
Melting point/freezing point	not determined
Initial boiling point and boiling range	351,4 K at 1.013 hPa
Flash point	23 – <60 °C
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	LEL: 2,5 vol% / UEL: 19 vol%
Vapour pressure	57,26 hPa at 19,6 °C
Density	1,05 – 1,1 $^{g}/_{cm^3}$
Vapour density	this information is not available
Relative density	information on this property is not available
Solubility	not determined

- n-octanol/water (log KOW)	this information is not available

Auto-ignition temperature	>363 °C (auto-ignition temperature (liquids and gases))
Decomposition temperature	no data available

Viscosity

- kinematic viscosity	not determined
- dynamic viscosity	25.000 – 50.000 cP

Explosive properties	none
Oxidising properties	none

9.2 Other information

There is no additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

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

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidisers.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

- acute toxicity estimate (ATE)

Exposure route	ATE
Inhalation: dust/mist	9,2 mg/l/4h

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
Glycerol	56-81-5	inhalation: vapour	25 mg/l/4h
Glycerol	56-81-5	inhalation: dust/mist	>5,85 mg/l/4h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	dermal	>2.000 mg/kg
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	inhalation: dust/mist	>5,01 mg/l/4h
sodium peroxoborate	11138-47-9	oral	1.300 mg/kg
sodium peroxoborate	11138-47-9	dermal	>2.000 mg/kg
Citric acid	77-92-9 5949-29-1	dermal	>2.000 mg/kg
Polyethylene glycol	25322-68-3	oral	>2.000 mg/kg
Polyethylene glycol	25322-68-3	dermal	>2.000 mg/kg

Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Ethanol	64-17-5	oral	LD50	10.470 mg/kg	rat
Ethanol	64-17-5	inhalation: vapour	LC50	124,7 mg/l/4h	rat
Glycerol	56-81-5	dermal	LD50	>18.700 mg/kg	rabbit
Glycerol	56-81-5	oral	LD50	27.200 mg/kg	rat
Glycerol	56-81-5	inhalation: dust/mist	LC50	>5.850 mg/m³/4h	rat
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	oral	LD50	>5.000 mg/kg	rat
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	inhalation: dust/mist	LC50	>5,01 mg/l/4h	rat
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	dermal	LD50	>2.000 mg/kg	rabbit
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	oral	LD50	8.980 mg/kg	rat
sodium peroxoborate	11138-47-9	oral	LD50	1.300 mg/kg	rat
sodium peroxoborate	11138-47-9	dermal	LD50	>2.000 mg/kg	rabbit
Citric acid	77-92-9 5949-29-1	oral	LD50	5.400 mg/kg	mouse
Citric acid	77-92-9 5949-29-1	dermal	LD50	>2.000 mg/kg	rat

Acute toxicity of components					
Name of substance	**CAS No**	**Exposure route**	**Endpoint**	**Value**	**Species**
Polyethylene glycol	25322-68-3	oral	LD50	>2.000 $^{mg}/_{kg}$	rat
Polyethylene glycol	25322-68-3	dermal	LD50	>2.000 $^{mg}/_{kg}$	rat

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

May damage the unborn child. May damage fertility.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0,1%.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	**CAS No**	**Endpoint**	**Value**	**Species**	**Exposure time**
Ethanol	64-17-5	LC50	15.400 $^{mg}/_{l}$	fish	96 h
Ethanol	64-17-5	EC50	12.700 $^{mg}/_{l}$	fish	96 h
Ethanol	64-17-5	ErC50	22.000 $^{mg}/_{l}$	algae	96 h
Glycerol	56-81-5	EC50	>2.900 $^{mg}/_{l}$	algae	48 h
Glycerol	56-81-5	EC50	>10.000 $^{mg}/_{l}$	microorganisms	72 h
Glycerol	56-81-5	LC50	54.000 $^{mg}/_{l}$	fish	96 h

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	LC50	>5.000 mg/l	fish	96 h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	LL50	>1.000 mg/l	fish	96 h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	EL50	>10.000 mg/l	aquatic invertebrates	24 h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	EC50	>5.000 mg/l	aquatic invertebrates	48 h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	ErC50	>173,1 mg/l	algae	72 h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	NOEC	500 mg/l	fish	96 h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	NOELR	1.000 mg/l	fish	96 h
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	LC50	>400 mg/l	fish	96 h
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	EC50	>18,3 mg/l	fish	96 h
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	ErC50	>200 mg/l	algae	72 h
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	NOEC	102 mg/l	algae	72 h
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	LOEC	328 mg/l	algae	72 h
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	growth rate (ErCx) 30%	266 mg/l	algae	72 h
sodium peroxoborate	11138-47-9	LC50	51 mg/l	fish	96 h
sodium peroxoborate	11138-47-9	EC50	11 mg/l	aquatic invertebrates	48 h
sodium peroxoborate	11138-47-9	ErC50	6,3 mg/l	algae	72 h
sodium peroxoborate	11138-47-9	NOEC	25 mg/l	fish	96 h
Citric acid	77-92-9 5949-29-1	LC50	440 mg/l	fish	48 h
Polyethylene glycol	25322-68-3	LC50	>100 mg/l	fish	96 h
Polyethylene glycol	25322-68-3	EC50	>100 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Ethanol	64-17-5	EC50	22,6 g/l	algae	10 d
Ethanol	64-17-5	LC50	1.806 mg/l	aquatic invertebrates	10 d
Ethanol	64-17-5	ErC50	675 mg/l	algae	4 d

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Ethanol	64-17-5	NOEC	250 mg/l	fish	120 h
Ethanol	64-17-5	growth rate (Er-Cx) 10%	86 mg/l	algae	4 d
Glycerol	56-81-5	EC50	>10.000 mg/l	daphnia magna	24 h
Glycerol	56-81-5	LC50	>10.000 mg/l	orfe (Leuciscus idus)	h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	EC50	>2.500 mg/l	microorganisms	3 h
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	NOEC	86,03 mg/l	fish	30 d
Silica (silicon dioxide containing crystalline and amorphous)	112945-52-5	LOEC	149,2 mg/l	aquatic invertebrates	21 d
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	EC50	>100 mg/l	microorganisms	14 d
1,2-benzisothiazol-3(2H)-one 1,1-dioxide, sodium salt	128-44-9	NOEC	307,1 mg/l	fish	28 d
Citric acid	77-92-9 5949-29-1	LC50	1.535 mg/l	aquatic invertebrates	24 h
Citric acid	77-92-9 5949-29-1	NOEC	425 mg/l	algae	8 d
Polyethylene glycol	25322-68-3	NOEC	17.475 mg/l	aquatic invertebrates	21 d

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of ≥ 0,1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0,1%.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste (Basel Convention)

Properties of waste which render it hazardous

H3 Flammable liquids

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number

UN RTDG	UN 1993
IMDG-Code	UN 1993
ICAO-TI	UN 1993

14.2 UN proper shipping name

UN RTDG	FLAMMABLE LIQUID, N.O.S.
IMDG-Code	FLAMMABLE LIQUID, N.O.S.
ICAO-TI	Flammable liquid, n.o.s.
Technical name (Hazardous ingredients)	Ethanol, sodium peroxoborate

14.3 Transport hazard class(es)

UN RTDG	3
IMDG-Code	3
ICAO-TI	3

14.4 Packing group

UN RTDG	III
IMDG-Code	III
ICAO-TI	III

14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to IMO instruments

No data available.

Additional information for each of the UN Model Regulations

Transport information - national regulations - additional information (UN RTDG)

UN number	1993
Class	3
Packing group	III
Danger label(s)	3



Special provisions (SP)	223, 274 (UN RTDG)
Excepted quantities (EQ)	E1 (UN RTDG)
Limited quantities (LQ)	5 L (UN RTDG)

International Maritime Dangerous Goods Code (IMDG) - additional information

Marine pollutant	-
Danger label(s)	3



Special provisions (SP)	223, 274, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-E
Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR) - additional information

Danger label(s)	3



Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

SECTION 15: Regulatory information

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

There is no additional information.

National regulations (China)

Inventory of Existing Chemical Substances Produced or Imported in China (IECSC)

Not all ingredients are listed.

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.3	Details of the supplier of the safety data sheet: Bluem Europe Enkweg 6c 8131 VH Wijhe Netherlands Telephone: +31 (0)85 303 11 49 e-mail: info@bluemcare.com Website: www.bluemcare.com	Details of the supplier of the safety data sheet: Bluem Europe Grote Voort 247 8041 BL Zwolle Netherlands Telephone: +31 (0)85 303 11 49 e-mail: info@bluemcare.com Website: www.bluemcare.com
16	Indication of changes (revised safety data sheet): Complete revision of the safety data sheet.	

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ED	Endocrine disruptor
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GBZ 2.1	Ministry of Health: occupational exposure limits for hazardous agents in the workplace
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code

Abbr.	Descriptions of used abbreviations
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
LOEC	Lowest Observed Effect Concentration
NOEC	No Observed Effect Concentration
NOELR	No Observed Effect Loading Rate
OEL	Workplace exposure limit
Ox. Sol.	Oxidising solid
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Repr.	Reproductive toxicity
STEL	Short-term exposure limit
STOT SE	Specific target organ toxicity - single exposure
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
UN RTDG	UN Recommendations on the Transport of Dangerous Good
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

General Rule for Classification and Hazard Communication of Chemicals (National Standard GB 13690). National Standard: Safety Data Sheet for Chemical Products - Content and Order of Sections. GB/T 16483. National Standard: Guidance on Compilation of Safety Data Sheet for Chemical Products. GB/T 17519.

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H272	May intensify fire; oxidizer.
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.

Code	Text
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H333	May be harmful if inhaled.
H335	May cause respiratory irritation.
H360	May damage fertility or the unborn child.
H401	Toxic to aquatic life.
H402	Harmful to aquatic life.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.