

Safety Data Sheet

according to Regulation (EC) No 1907/2006

VitaLoSol Gold SC

Revision date: 06.05.2020

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

VitaLoSol Gold SC

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**Fertilizers
agrochemicals**1.3. Details of the supplier of the safety data sheet**

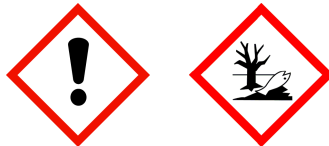
Company name:	Lebosol Dünger GmbH
Street:	Wiesengasse 28
Place:	D-67471 Elmstein
Telephone:	+49 (0)6328-98494-0
e-mail:	msds@lebosol.de
Contact person:	Giftnotrufzentrale
Internet:	www.lebosol.de

1.4. Emergency telephone number:

Giftnotrufzentrale Mainz- 24h- Tel.:+49(0)6131-19240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:
Skin corrosion/irritation: Skin Irrit. 2
Hazardous to the aquatic environment: Aquatic Acute 1
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Causes skin irritation.
Very toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Signal word:** Warning**Pictograms:****Hazard statements**

H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P264	Wash hands thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P391	Collect spillage.

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P501 Dispose of contents/container to an approved waste disposal plant in accordance with local/regional/national/international regulations.

Special labelling of certain mixtures

EUH208 Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Suspension

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
7704-34-9	sulfur			35 - < 40 %
	231-722-6	016-094-00-1	01-2119487295-27	
	Skin Irrit. 2; H315			
107-21-1	Ethandiol (vgl. Glykol)			5 - < 10 %
	203-473-3		01-2119456816-28	
	Acute Tox. 4, STOT RE 2; H302 H373			
1332-65-6	dicopper chloride trihydroxid			1 - < 5 %
	215-572-9		01-2119966120-46	
	Acute Tox. 3, Acute Tox. 4, Aquatic Acute 1, Aquatic Chronic 1; H301 H332 H400 H410			
2634-33-5	1,2-benzisothiazol-3(2H)-one			< 0.1 %
	220-120-9	613-088-00-6	01-2120761540-60	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1; H302 H315 H318 H317 H400			

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice.
 Never give anything by mouth to an unconscious person or a person with cramps.
 If unconscious place in recovery position and seek medical advice.

After inhalation

Provide fresh air. Remove casualty to fresh air and keep warm and at rest.
 If breathing is irregular or stopped, administer artificial respiration.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Immediately remove any contaminated clothing, shoes or stockings.
 After contact with skin, wash immediately with plenty of water and soap.
 Do not wash with: Solvents/Thinner.

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After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. If swallowed, rinse mouth with water (only if the person is conscious).
Call a physician immediately.
Put victim at rest, cover with a blanket and keep warm.
Do NOT induce vomiting.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings. alcohol resistant foam, Carbon dioxide (CO₂), Extinguishing powder, Water mist

Unsuitable extinguishing media

High power water jet

5.2. Special hazards arising from the substance or mixture

Non-flammable. Burning produces heavy smoke.

Hazardous decomposition products: carbon black. Danger of serious damage to health by prolonged exposure.

Use appropriate respiratory protection.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. Use water spray jet to protect personnel and to cool endangered containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Contains: Solvent - Keep away from sources of ignition - No smoking. Ventilate affected area.

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

Safe handling: see section 7

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains. 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.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Prevent spread over a wide area (e.g. by

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containment or oil barriers). Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Collect in closed and suitable containers for disposal. Disposal: see section 13

Clean with detergents. Avoid solvent cleaners.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Contains: Solvent - In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop. Only use the material in places where open light, fire and other flammable sources can be kept away. Use explosion-proof electrical equipment.

Never use pressure to empty container. Keep/Store only in original container. Do not allow to enter into surface water or drains. Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

Avoid contact with skin, eyes and clothes. Avoid: Inhalation of vapours or spray/mists, Inhalation of dust/particles. When using do not eat, drink or smoke.

Advice on protection against fire and explosion

Solvent - Vapours are heavier than air, spread along floors and form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store in accordance with: Betriebssicherheitsverordnung (BetrSichV)

Hints on joint storage

Do not store together with: Oxidising agent, Strong acid, Strong alkali

Keep away from food, drink and animal feedingstuffs.

Further information on storage conditions

Our products are tested between -10° and + 45°C and can be stored within this temperature-range. Occurring crystals due to cold storage will dissolve again at higher temperatures. We recommend a frost-free storage and a product-temperature above +5°C at the time of use.

7.3. Specific end use(s)

leaf fertilizer

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
107-21-1	Ethane-1,2-diol, vapour	20	52		TWA (8 h)	WEL
		40	104		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
107-21-1	Ethandiol (vgl.Glykol)		
Worker DNEL, long-term	inhalation	local	35 mg/m ³
Worker DNEL, long-term	dermal	systemic	106 mg/kg bw/day
Consumer DNEL, long-term	inhalation	local	7 mg/m ³
Consumer DNEL, long-term	dermal	systemic	53 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment	Value	
107-21-1	Ethandiol (vgl.Glykol)	
Freshwater	10 mg/l	
Marine water	1 mg/l	
Freshwater sediment	20,9 mg/kg	
Soil	1,53 mg/kg	
2634-33-5	1,2-benzisothiazol-3(2H)-one	
Micro-organisms in sewage treatment plants (STP)	EC20/ 3h 3,3 mg/l	

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles, Eye glasses with side protection

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Wear suitable gloves. DIN EN 374

Suitable material: NR (natural rubber, natural latex) NBR (Nitrile rubber) PVC (Polyvinyl chloride) FKM (fluoro rubber)

Thickness of the glove material > 0,4mm

Breakthrough time (maximum wearing time): 480 min.

In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

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Skin protection

Wear suitable protective clothing. Wear anti-static footwear and clothing (Natural fibres (e.g. cotton) / heat-resistant synthetic fibres)

Respiratory protection

Wear breathing apparatus if exposed to aerosols. Particle filter device (DIN EN 143) P3

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	yellow	
Odour:	like: SULPHUR	
pH-Value (at 20 °C):		7-8

Changes in the physical state

Melting point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flash point:		not determined
Sustaining combustion:		No data available

Flammability

Solid:		not applicable
Gas:		not applicable

Explosive properties

not applicable

Lower explosion limits:		not determined
Upper explosion limits:		not determined

Self-ignition temperature

Solid:		not applicable
Gas:		not applicable

Decomposition temperature:		not determined
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Oxidizing properties

Not oxidising.

Vapour pressure:		not determined
Density (at 20 °C):		1,58 g/cm ³
Water solubility:		dispersible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:		not determined
Flow time:		Daten nicht verfügbar
Relative vapour density:		not determined
Evaporation rate:		not determined

9.2. Other information

Solid content:		not determined
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SECTION 10: Stability and reactivity

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10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Oxidising agent, Strong acid, Strong alkali

10.4. Conditions to avoid

In case of warming: Formation of: Hazardous decomposition products

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

 Nitrogen oxides (NOx), carbon black, Carbon dioxide (CO₂), Carbon monoxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7704-34-9	sulfur				
	oral	LD50 > 5000 mg/kg	Rat		
107-21-1	Ethandiol (vgl.Glykol)				
	oral	ATE 500 mg/kg			
	dermal	LD50 >3500 mg/kg	Mouse	GESTIS	
	inhalation gas	LC50 >2,5 ppm	Rat		
1332-65-6	dicopper chloride trihydroxid				
	oral	LD50 299 mg/kg	Mouse	Echa CLH Report	
	dermal	LD50 >2000 mg/kg	Rabbit	Echa CLH Report	
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 2,83 mg/l	Rat	Echa	EC Guideline B.2 and OECD 403
2634-33-5	1,2-benzisothiazol-3(2H)-one				
	oral	ATE 500 mg/kg			

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7704-34-9	sulfur					
	Acute fish toxicity	LC50	866 mg/l	96 h	Danio rerio	
107-21-1	Ethandiol (vgl. Glykol)					
	Acute fish toxicity	LC50	72860 mg/l	96 h	Pimephales promelas (fathead minnow)	
	Acute algae toxicity	ErC50	6500-13000 mg/l	96 h	Selenastrum capricornutum	
	Acute crustacea toxicity	EC50	>100 mg/l	48 h	Daphnia magna (Big water flea)	OECD 202
	Fish toxicity	NOEC	15380 mg/l	7 d	Pimephales promelas (fathead minnow)	
	Crustacea toxicity	NOEC	8590 mg/l	7 d	Ceriodaphnia spec	
1332-65-6	dicopper chloride trihydroxid					
	Acute crustacea toxicity	EC50	0,026 mg/l	48 h	Daphnia magna	Gestis

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
107-21-1	Ethandiol (vgl. Glykol)				
	OECD 301A	90-100%	10		

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	Ethandiol (vgl. Glykol)	-1,36

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. There are no data available on the mixture itself.

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation. Do not allow to enter into surface water or drains.

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Dispose according to legislation.

List of Wastes Code - residues/unused products

020108 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING; wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing; agrochemical waste containing hazardous substances; hazardous waste


Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

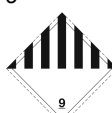
Dispose according to legislation.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. dicopper chloride trihydroxid
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9 
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	90
Tunnel restriction code:	-

Inland waterways transport (ADN)

14.1. UN number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. dicopper chloride trihydroxid
14.3. Transport hazard class(es):	9
14.4. Packing group:	III
Hazard label:	9 
Classification code:	M6
Special Provisions:	274 335 375 601
Limited quantity:	5 L
Excepted quantity:	E1

Marine transport (IMDG)

14.1. UN number:	UN 3082
14.2. UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. copper oxychloride
14.3. Transport hazard class(es):	9

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14.4. Packing group:

III

Hazard label:

9



Marine pollutant:

yes

Special Provisions:

274, 335, 969

Limited quantity:

5 L

Excepted quantity:

E1

EmS:

F-A, S-F

Air transport (ICAO-TI/IATA-DGR)
14.1. UN number:

UN 3082

14.2. UN proper shipping name:

 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
copper oxychloride

14.3. Transport hazard class(es):

9

14.4. Packing group:

III

Hazard label:

9



Special Provisions:

A97 A158 A197

Limited quantity Passenger:

30 kg G

Passenger LQ:

Y964

Excepted quantity:

E1

IATA-packing instructions - Passenger:

964

IATA-max. quantity - Passenger:

450 L

IATA-packing instructions - Cargo:

964

IATA-max. quantity - Cargo:

450 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:

Yes



Danger releasing substance:

copper oxychloride

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

2010/75/EU (VOC):

4,001 %

2004/42/EC (VOC):

4,001 %

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Information according to 2012/18/EU (SEVESO III):

E1 Hazardous to the Aquatic Environment

National regulatory information

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D):

3 - highly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,3,14.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Aquatic Acute 1; H400	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H373	May cause damage to kidneys through prolonged or repeated exposure by swallowing.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)