

SAFETY DATA SHEET (EC 1907/2006)

Biosol E

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5325450076

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

1.1. Product identifier

Trade name Biosol E 2.000 ml (#5325450080)
5.000 ml (#5325450076)

REACH Registration No.: if available listed in Chapter. 3

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

Relevant applications identified For dental use only.

1.3. Details of the supplier of the safety data sheet

Company emwerk GmbH
Bgm.-Otto-Knapp-Straße 49
D-49163 Bohmte
Telephone +49 (0)5471/9515010
Telefax +49 (0)7150/34113
Email address sales@emwerk.de

1.4. Emergency telephone number

Emergency information +49 (0)5471/9515010 (This telephone number is available during office hours only.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Remarks Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.,
Assessment of hazardous properties and decision regarding classification as per VO EG
1272/2008 Chap. 2.

2.2. Label elements

Labelling as per (EU) 1272/2008

Remarks Labelling not required according to EU-CLP Ordinance (1272/2008).

2.3. Other hazards

No hazardous reactions are known if properly handled and stored., Contains small amounts of (below the concentration to take them into consideration for):, Formaldehyde
A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

SECTION 3: Composition/information on ingredients

3.1. Substances

-

3.2. Mixtures

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Information on ingredients / Hazardous components as per EU-CLP Regulation (EC) No. 1272/2008

• Metasilicic acid		25% - 45%	
CAS-No.	7699-41-4	EC-No.	231-716-3
• 1,2-ethanediol		2% - 4%	
CAS-No.	107-21-1	EC-No.	203-473-3
Acute toxicity (oral)		Category 4	H302
• formaldehyde...%		< 0.2%	
CAS-No.	50-00-0	EC-No.	200-001-8
Carcinogenicity		Category 1B	H350
Acute toxicity (inhalation)		Category 3	H331
Acute toxicity (dermal)		Category 3	H311
Acute toxicity (oral)		Category 3	H301
Skin corrosion/irritation		Category 1B	H314
Skin Sensitisation		Category 1	H317
Germ cell mutagenicity		Category 2	H341
• distilled water		50 - 73%	
CAS-No.	7732-18-5	EC-No.	231-791-2

Texts of H phrases, see in Chapter 16

SECTION 4: First aid measures**4.1. Description of first aid measures**

Remove contaminated or saturated clothing.

Inhalation

If aerosol or mists are formed:

Move victims into fresh air.

Skin contact

Upon skin contact, wash with plenty of water.

If symptoms persist, call a physician.

Eye contact

Rinse thoroughly with plenty of water keeping eyelid open.

In case of persistent discomfort

Consult an ophthalmologist.

Ingestion

Have the mouth rinsed with water.

After absorbing large amounts of substance

Do NOT induce vomiting.

Have patient drink plenty of water in small sips.

Obtain medical attention.

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

No information available.

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

If skin sensitisation has developed and a causal relationship has been confirmed, further exposure should not be allowed

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

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Suitable extinguishing media: Water spray
Foam
quenching powder
Carbon dioxide (CO₂)
Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

5.3. Advice for firefighters

Extinction measures are to be adjusted to the specific location.
Employ protective equipment commonly used in the event of fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.
Before tackling a spillage put on protective equipment including suitable goggles, gloves, protective overalls and boots.

6.2. Environmental precautions

Prevent substance from entering soil, natural bodies of water and sewer systems.

6.3. Methods and material for containment and cleaning up

Pick up mechanically with a suitable material and collect in a suitable container.

6.4. Reference to other sections

Wear personal protective equipment; see section 8.
Disposal considerations; see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Local ventilation.
Do not allow containers and vessels to stand open
Wear suitable protective clothing and gloves.

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion

No special measures are required.

Storage

Keep container tightly closed in a dry and well-ventilated place.

German storage class

12 - Non Combustible Liquids

Storage stability

Protect from frost.
Keep at temperatures of between 5 °C and 30 °C.

7.3. Specific end use(s)

We are unaware of any specific end uses which go beyond the data reported in Section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

• 1,2-ethanediol

CAS-No.

107-21-1

EC-No.

203-473-3

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Control parameters type of exposure	Particulate. Can be absorbed through the skin.	Skin designation:(EH40 WEL)
Control parameters type of exposure	10 mg/m3 Particulate.	Time Weighted Average (TWA):(EH40 WEL)
Control parameters type of exposure	20 ppm 52 mg/m3 Vapor.	Time Weighted Average (TWA):(EH40 WEL)
Control parameters type of exposure	Vapor. Can be absorbed through the skin.	Skin designation:(EH40 WEL)
Control parameters type of exposure	40 ppm 104 mg/m3 Vapor.	Short Term Exposure Limit (STEL):(EH40 WEL)
Control parameters	Can be absorbed through the skin.	Skin designation:(EU ELV)
Control parameters	20 ppm 52 mg/m3 Indicative	Time Weighted Average (TWA):(EU ELV)
Control parameters	40 ppm 104 mg/m3 Indicative	Short Term Exposure Limit (STEL):(EU ELV)
• formaldehyde...%		
CAS-No.	50-00-0	EC-No. 200-001-8
Control parameters	2 ppm 2.5 mg/m3	Short Term Exposure Limit (STEL):(EH40 WEL)
Control parameters	2 ppm 2.5 mg/m3	Time Weighted Average (TWA):(EH40 WEL)

8.2. Exposure controls

Engineering measures

Local ventilation.

Personal protective equipment

Respiratory protection

Respirator with brown A-type filter

Hand protection

Protective gloves, The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye/face protection

Safety glasses with side-shields

Skin and body protection

Usual lab protective clothing

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice., Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work.

Protective measures

If workplace exposure limits are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used., If there is the possibility of skin/eye contact, the indicated hand/eye/body protection should be used.

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Appearance

Form liquid
Colour blue / milky white
Odour weakly of formaldehyde

Odour threshold: No data available

pH ca. 10 Medium: Water

Melting point/range No data available

Boiling point/range > 100 °C

Flash point Not combustible.

Evaporation rate No data available

Flammability (solid, gas) not flammable

Lower explosion limit not applicable

Upper explosion limit not applicable

Vapour pressure No data available

Density ca. 1.2 - 1.33 g/cm³

Miscibility in water completely miscible

Partition coefficient: n-octanol/water No data available

Autoinflammability Not capable of spontaneous combustion or heating.

Thermal decomposition No data available

Viscosity, dynamic No data available

Explosiveness not explosive

Oxidizing properties not oxidizing

9.2. Other information

Other information No further physicochemical data were determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

The product is chemically stable.

10.3. Possibility of hazardous reactions

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Possibility of hazardous reactions No dangerous reactions known.

10.4. Conditions to avoid
temperatures: < 5 °C

10.5. Incompatible materials
Acids

10.6. Hazardous decomposition products
Formaldehyde
Keep at temperatures of between 5 °C and 30 °C.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity	LD50 Rat: > 15000 mg/kg Test substance: Metasilicic acid literature
Acute inhalation toxicity	no data available
Acute dermal toxicity	No data available
Skin irritation	Rabbit not irritating literature
Eye irritation	Rabbit not irritating literature
Sensitization	no data available
Repeated dose toxicity	no data available
Mutagenicity assessment	no data available
Carcinogenicity	No data available
Toxicity to reproduction	No data available
Human experience	Toxic effects from handling this product are unknown as yet.

SECTION 12: Ecological information

12.1. Toxicity

No ecotoxicological data is available for this product.

Toxicity to fish	LC0 Leuciscus idus melanotus: 500 mg/l literature
Toxicity to bacteria	Pseudomonas fluorescens: > 5000 mg/l literature

12.2. Persistence and degradability

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Biodegradability no data available

12.3. Bioaccumulative potential

Bioaccumulation no data available

12.4. Mobility in soil

Mobility No further information available

12.5. Results of PBT and vPvB assessment

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

12.6. Other adverse effects

Further Information Introduction into soil, natural water bodies or sewerage must be prevented.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product

Disposal according to local authority regulations.

Uncleaned packaging

Disposal according to local authority regulations.

SECTION 14: Transport information

Not dangerous according to transport regulations.

14.1. UN number: --
14.2. UN proper shipping name: --
14.3. Transport hazard class(es): --
14.4. Packing group: --
14.5. Environmental hazards: --
14.6. Special precautions for user: No

SECTION 15: Regulatory information

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

National legislation

15.2. Chemical safety assessment

Chemical safety assessment No Chemical Safety Report as per Articles 2(8), 2(9) or 14 of the REACH Regulation is required for this product.

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SECTION 16: Other information

Classification and applied procedure to derive the classification of mixtures according to EU Regulation (EC) No. 1272/2008 (CLP)

Relevant H phrases from chapter 3

H301 : Toxic if swallowed.
H302 : Harmful if swallowed.
H311 : Toxic in contact with skin.
H314 : Causes severe skin burns and eye damage.
H317 : May cause an allergic skin reaction.
H331 : Toxic if inhaled.
H341 : Suspected of causing genetic defects.
H350 : May cause cancer.

Further information

Further information Assessment of hazardous properties and decision regarding classification as per VO EG 1272/2008 Chap. 2.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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Legend

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ASTM American Society for Testing and Materials
ATP Adaptation to Technical Progress
BCF Bioconcentration factor
BetrSichV German Ordinance on Industrial Safety and Health
c.c. closed cup
CAS Chemical Abstract Services
CESIO European Committee of Organic Surfactants and their Intermediates
ChemG German Chemicals Act
CMR carcinogenic-mutagenic-toxic for reproduction
DIN German Institute for Standardization
DMEL Derived minimum effect level
DNEL Derived no effect level
EINECS European Inventory of Existing Commercial Chemical Substances
EC50 half maximal effective concentration
GefStoffV German Ordinance on Hazardous Substances
GGVSEB German ordinance for road, rail and inland waterway transportation of dangerous goods
GGVSee German ordinance for sea transportation of dangerous goods
GLP Good Laboratory Practice
GMO Genetic Modified Organism

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IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
ISO	International Organization For Standardization
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
REACH	REACH registration
RID	Convention concerning International Carriage by Rail
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
TA	Technical Instructions
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
VCI	German chemical industry association
vPvB	very persistent, very bioaccumulative
VOC	volatile organic compounds
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to Waters into Water Hazard Classes
WGK	Water Hazard Class
WHO	World Health Organization