

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product number : P-1000, P-500
Product name : BioMycoX® Mycoplasma Prevention Spray
Recommended use of the chemical and restrictions on use
Recommended use : For R&D use only. Not for use in pharmaceuticals, household, or other purposes.
Manufacturer or supplier's details
Company : CellSafe Co., Ltd.
Responsible Department : #911, AceDongbaekTower 1dong, 16-4, Dongbaekjungang-ro 16beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 17015 Republic of Korea
E-mail address : customer@cells-safe.com
Emergency telephone number : +82-31-285-9958

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Flammable liquids (Category 3)

Serious eye damage/eye irritation (Category 1)

Specific target organ toxicity – single exposure (Category 3), Central nervous

GHS Classification

Hazard pictograms



Hazard statements

H226 : Flammable liquid and vapour.
H318 : Causes serious eye damage.
H336 : May cause drowsiness or dizziness.

Precautionary statements

P210 : Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P223 : Keep container tightly closed.
P240 : Ground/bond container and receiving equipment.

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|-----------------------------------|--|
| P241 | : Use explosion-proof electrical/ ventilating/ lighting equipment. |
| P242 | : Use only non-sparking tools. |
| P243 | : Take precautionary measures against static discharge. |
| P261 | : Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray |
| P271 | : Use only outdoors or in a well-ventilated area. |
| P280 | : Wear protective gloves/ eye protection/ face protection. |
| Response | |
| P303+ P361 + P353 | : If in skin (or hair), Take off immediately all contaminated clothing. Rinse skin with water/shower |
| P304+ P340 + P312 | : If inhaled, Remove person to fresh air and keep comfortable for breathing. |
| P305+ P351 + P338 + P310 | : If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P370 + P378 | : In case of fire, use dry sand, dry chemical powder, or foam extinguisher. |
| Storage | |
| P403 + P233 | : Store in a well-ventilated place. Keep container tightly closed. |
| P403 + P235 | : Store in a well-ventilated place. Keep cool. |
| P405 | : Store locked up. |
| Disposal | |
| P501 | : Dispose of contents and container according to wastes control act. |
| Skin-sensitive Ingredients | : Glutaral May cause allergic reactions. |
| Other hazards | : Not Applicable |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| | | | |
|------------------|---------------|------------|----------------|
| Component | Ethyl alcohol | n-Propanol | Glutaraldehyde |
| CAS-No | 64-17-5 | 71-23-8 | 111-30-8 |
| EC-No | 200-578-6 | 200-746-9 | 203-856-5 |
| Weight % | 15-20% | 30-35% | < 0.1% |

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4. FIRST AID MEASURES

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| In case of eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician. |
| In case of skin contact | : Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician. |
| If inhaled | : Remove person to fresh air and keep comfortable for breathing. Consult a physician if necessary. |
| If swallowed | : If accidentally swallowed obtain immediate medical attention. Do not induce vomiting wash out mouth with water. Never give anything by mouth to an unconscious person. |
| Notes to physician | : No data available |

5. FIREFIGHTING MEASURES

| | |
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| Suitable extinguishing media | : Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical. |
| Unsuitable extinguishing media | : No information available |
| Specific hazards during firefighting | : Mixture with combustible ingredients. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire. |
| Protective equipment and precautions for firefighters | : Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. |

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions

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: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

: Contain spillage, and then collect with non-combustible absorbent material and place in container for disposal according to regulations. (see section 13).

7. HANDLING AND STORAGE

Precautions for safe handling

: Use personal protective equipment such as gloves, masks, and lab coats.

Conditions for safe storage, including any incompatibilities

: Keep containers tightly closed in a dry, cool, and well-ventilated place. Keep away from sources of ignition.

Storage condition : Room temperature

Specific end use(s) : For research use only.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits : Contains no substances with occupational exposure limit values.

Ethyl alcohol

ACGIH TLV (TWA) : Not established

ACGIH TLV (STEL) : 1000ppm

Korea OEL (TWA) : 1000ppm

Korea OEL (STEL) : Not established

n-Propanol

ACGIH TLV (TWA) : 100ppm

ACGIH TLV (STEL) : Not established

Korea OEL (TWA) : 200ppm

Korea OEL (STEL) : 250ppm

Glutaraldehyde

ACGIH (TWA) : 0.05ppm

ACGIH OEL (STEL) : Not established

Korea OEL (TWA) : Not established

Korea OEL (STEL-C) : 0.05ppm

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Exposure controls

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|---------------------------------|---|
| Respiratory protection | : In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards. |
| Hand protection | : Wear suitable gloves. Glove material: Compatible chemical-resistant gloves. |
| Eye protection | : Tight sealing safety goggles |
| Skin and Body protection | : Wear suitable protective clothing. |
| Hygiene Measures | : Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|----------------------------|
| Appearance | : Liquid |
| Odor | : colorless |
| pH | : 7 (1% aqueous solution) |
| Melting point/range | : No data available |
| Boiling point/range | : No data available |
| Flash point | : 26.5°C |
| Evaporation rate | : No data available |
| Flammability (solid, gas) | : No data available |
| Upper explosion limit / Upper flammability limit | : No data available |
| Lower explosion limit / Lower flammability limit | : No data available |
| Vapor pressure/density | : No data available |
| Relative density | : No data available |
| Solubility | : Soluble in water |
| Partition coefficient: n-octanol/water | : No data available |
| Viscosity | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |
| Other information | : No information available |

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10. STABILITY AND REACTIVITY

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| Chemical stability | : Stable under recommended storage conditions. |
| possibility of hazardous reactions | : Hazardous reaction has not been reported. |
| Conditions to avoid | : No data available |
| Incompatible materials | : No dangerous reaction known under conditions of normal use. |
| Hazardous decomposition products | : No data available |

11. TOXICOLOGICAL INFORMATION

Principal Routes of Exposure

Acute toxicity

Ethyl alcohol

| | |
|------------------------|-------------------------------|
| LD50 Oral | : 7,060mg/kg (Rat) OECD 401 |
| LD50 Dermal | : No data available |
| LD50 Inhalation | : 116.9mg/L 4h (Rat) OECD 403 |

n-Propanol

| | |
|------------------------|-----------------------|
| LD50 Oral | : 1,870mg/kg (Rat) |
| LD50 Dermal | : 4,302mg/kg (Rabbit) |
| LD50 Inhalation | : >33.8mg/L (Rat) 4h |

Glutaraldehyde

| | |
|------------------------|----------------------------|
| LD50 Oral | : 200mg/kg (Rat) |
| LD50 Dermal | : >2000mg/kg (Rabbit) |
| LD50 Inhalation | : 0.28 ~ 0.39mg/L (Rat) 4h |

Skin corrosion/irritation : No data available

Serious eye : No data available

damage/irritation

Respiratory : No data available

or skin sensitization

Specific target organ : No data available

toxicity (STOT)–single

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| | |
|------------------------|---------------------|
| exposure | |
| STOT-repeated exposure | : No data available |
| Carcinogenicity | : No data available |
| Germ cell mutagenicity | : No data available |
| Reproductive toxicity | : No data available |
| Aspiration hazard | : No data available |

12. ECOLOGICAL INFORMATION

| | |
|--------------------------------------|--|
| Ecotoxicity | : Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. |
| Freshwater Fish | |
| Ethyl alcohol | : LC50 > 100mg/L 96 hr (Pimephales promelas) |
| n-Propanol | : LC50 = 4555mg/L 96 hr (Pimephales promelas) (OECD Guideline 203) |
| Glutaraldehyde | : LC50 = 0.8mg/L 96 hr (Oncorhynchus mykiss) |
| Water Flea | |
| Ethyl alcohol | : LC50 5012mg/L 48 hr (Ceriodaphnia dubia) (other guideline: ASTM E729-80) |
| n-Propanol | : LC50 1000mg/L 48 hr (Daphnid) |
| Glutaraldehyde | : No data available |
| Freshwater Algae | |
| Ethyl alcohol | : ErC50 275mg/L 72 hr (Chlorella vulgaris) (OECD Guideline 201) |
| n-Propanol | : No data available |
| Glutaraldehyde | : No data available |
| Mobility in soil | : No data available |
| Persistence and degradability | : No data available |
| Bioaccumulative potential | : No data available |
| Other adverse effects | : No data available |

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13. DISPOSAL CONSIDERATIONS

Disposal methods

- Waste from residues** : Dispose of contents/container in accordance with local regulation.
- Contaminated packaging** : Empty containers should be taken to an approved waste handling site for recycling or disposal.

Disposal precautions

: Dispose of contents and container according to wastes control act

14. TRANSPORT INFORMATION

IATA / ADR / IMDG

: regulated in the meaning of transport

- UN number** : ADR/RID: 1987 IMDG: 1987 IATA: 1987
- UN proper shipping name** : ADR/RID: Alcohol, N.O.S. (Ethyl alcohol, 1-Propanol)
: MDG: Alcohol, N.O.S. (Ethyl alcohol, 1-Propanol)
: IATA: Alcohol, N.O.S. (Ethyl alcohol, 1-Propanol)
- Transport hazard class(es)** : ADR/RID: 3 IMDG: 3 IATA: 3
- Packing group** : ADR/RID: 3, IMDG: 3, IATA: 3
- Environmental hazards** : ADR/RID: No, IMDG Marine pollutant: No, IATA: No
- Special precautions for user** : Not Applicable
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
: Not Applicable

15. REGULATORY INFORMATION

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

- Harmful Substances Required Permission for Manufacture** : Not applicable
- Harmful Substances Prohibited from Manufacturing** : Not applicable
- Harmful Agents to be kept below Occupational Exposure Limits** : 1-Propanol (CAS 71-23-8), Glutaraldehyde (CAS 111-30-8)
- Controlled Substances Subject to Environment** : Not applicable

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Monitoring

Controlled Substances Subject to Health Examination : Not applicable

Examination

Hazardous substances requiring management : Not applicable

Special Management Materials : Not applicable

Occupational exposure limit substances : Not applicable

Act on the Registration and Evaluation, etc. of Chemical Substances, Chemicals Control Act

Toxic Chemicals : Not applicable

Restricted Chemicals : Not applicable

Prohibited Chemicals : Not applicable

Accident Precaution Chemicals : Not applicable

Dangerous Substances Safety Management Act

: Flammable liquids, Alcohols

Wastes Control Act

: Follow article 13 of the act to dispose the product waste

Other requirements in domestic and other countries

: Not applicable

16. OTHER INFORMATION

Further information

Material source Korea Occupational Safety and Health Agency, Korea Information System for Chemical Management

Revision number and date

Number of Revision : 2

Revision Date : Feb. 1. 2024

ETC

: We have endeavored to compose the content of this safety data sheet as accurately as possible. Please be aware that this document is provided solely for reference purposes. The information in this document is based on current knowledge and may be applicable to the implementation of appropriate safety precautions for the product. However, we do not provide any warranty regarding the product's characteristics. It is important to note that this product is not intended for use as a drug, in households, or for any other purposes.