
SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name/designation** GREEN&CLEAN IK**1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses****Product categories [PC]**

disinfectants

1.3 Details of the supplier of the safety data sheet**Manufacturer**

METASYS Medizintechnik GmbH

Florianistrasse 3

AUSTRIA-6063 Rum bei Innsbruck

Telephone: *43-512-205420

Telefax: *43-512-205420-7

E-mail: sebastian.geiger@metasys.com

Department responsible for information: ENT

Information telephone: *43-512-205420

Information telefax: *43-512-205420-7

E-mail (competent person): sebastian.geiger@metasys.com

www.metasys.com

1.4 Emergency telephone number

Giftnotruf München *49-(0)89-19240

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Additional information**

The product will be applied by spraying.

Classification according to Regulation (EC) No 1272/2008 [CLP]**health hazards**

Eye Dam. 1

hazard statements for health hazards

H318 Causes serious eye damage.

health hazards

STOT SE 3

hazard statements for health hazards

H336 May cause drowsiness or dizziness.

Physical hazards

Flam. Liq. 1

hazard statements for physical hazards

H224 Extremely flammable liquid and vapour.

2.2 Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]****Hazard pictograms**



GHS02



GHS05



GHS07

Signal word

Danger

Hazard statements**Hazard statements for physical hazards**

H224 Extremely flammable liquid and vapour.

hazard statements for health hazards

H318 Causes serious eye damage.

H336 May cause drowsiness or dizziness.

Precautionary statements**General:**

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

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/doctor/.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/container to an appropriate recycling or disposal facility.

2.3 Other hazards

No data available

SECTION 3: Composition / information on ingredients**3.1/3.2 Substances/Mixtures****Hazardous ingredients**

| | |
|---|------|
| propan-2-ol | 25 % |
| CAS 67-63-0 | |
| EC 200-661-7 | |
| INDEX 603-117-00-0 | |
| Flam. Liq. 2, H225 / Eye Irrit. 2, H319 / STOT SE 3, H336 | |

| | |
|---|--------|
| propan-1-ol | 30 % |
| CAS 71-23-8 | |
| EC 200-746-9 | |
| INDEX 603-003-00-0 | |
| Flam. Liq. 2, H225 / Eye Dam. 1, H318 / STOT SE 3, H336 | |
| butan-2-ol | <=10 % |
| CAS 78-92-2 | |
| EC 201-158-5 | |
| INDEX 603-127-00-5 | |
| Flam. Liq. 3, H226 / Eye Irrit. 2, H319 / STOT SE 3, H335 / STOT SE 3, H336 | |

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation

In case of inhaling spray mists, consult a doctor immediately and show him box or label.

Following skin contact

After contact with skin, wash immediately with plenty of water and soap.

After eye contact

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist. Protect the eye that is not injured.

Following ingestion

Do not induce vomiting. Rinse mouth immediately and drink large quantities of water. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

Self-protection of the first aider

First aid assistant: Pay attention to self-protection!

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5: Firefighting measures

Additional information

Let off heat to prevent increase in pressure. Extinguishing materials should be selected according to the surrounding area. Move undamaged containers from immediate hazard area if it can be done safely. Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam. Water spray. Dry extinguishing powder. Carbon dioxide (CO₂).

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide. Carbon dioxide (CO₂).

5.3 Advice for firefighters

Special protective equipment for firefighters

In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures**Methods for cleaning up**

Water.

6.1 Personal precautions, protective equipment and emergency procedures**For non-emergency personnel****Personal precautions**

Remove all sources of ignition. Provide adequate ventilation. Vapours are heavier than air and will spread at floor level.

6.2 Environmental precautions

No special environmental protection measures are necessary.

6.3 Methods and material for containment and cleaning up

No data available

6.4 Reference to other sections

No data available

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Protective measures****Measures to prevent fire**

Highly flammable. Keep away from sources of ignition - No smoking.

Measures to prevent aerosol and dust generation

Use only in well-ventilated areas.

Environmental precautions

Refer to chapter 8.

7.2 Conditions for safe storage, including any incompatibilities**Hints on joint storage****Storage class**

Druckgaspackungen (Aerosolpackungen).

Further information on storage conditions**storage temperature**

Value 5 - 30 °C

7.3 Specific end use(s)**Recommendation**

Observe instructions for use.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Occupational exposure limit values**

| CAS No. | Substance name | LTV | STV | remark |
|---------|----------------|-------------------------------|-------------------------------|--------------------|
| 71-23-8 | Propan-1-ol | 500 mg/m ³ 200 ppm | 625 mg/m ³ 250 ppm | Great Britain (UK) |

| CAS No. | Substance name | LTV | STV | remark |
|---------|----------------|-------------------------------|--------------------------------|--|
| 67-63-0 | Propan-2-ol | 999 mg/m ³ 400 ppm | 1250 mg/m ³ 500 ppm | |
| 78-92-2 | Butan-2-ol | 308 mg/m ³ 100 ppm | 462 mg/m ³ 150 ppm | Great Britain (UK) Great Britain (UK) |

LTV = long-term occupational exposure limit value

STV = short-term occupational exposure limit value

source: GESTIS International Limit Values (<http://limitvalue.ifa.dguv.de/>)

Monitoring and observation processes: GESTIS Analytical Methods (<http://amcaw.ifa.dguv.de/>)

8.2 Exposure controls

Personal protection equipment

General protection and hygiene measures:

Do not eat, drink, smoke or sneeze at the workplace. Avoid contact with skin, eye and clothing. Wash contaminated clothing prior to re-use.

Eye/face protection

Suitable eye protection:

Framed glasses.

Skin protection

Suitable gloves type

Single-use gloves.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state

compressed gas

Colour

colourless

Odour

like:

Alcohol

| | parameter | Method - source - remark |
|--|--|--------------------------|
| | Evaporation rate | not determined |
| | Melting point/freezing point | not determined |
| | Boiling point or initial boiling point and boiling range | not determined |
| | flammability | not determined |
| | Upper explosion limit | 17,5 Vol-% |
| | lower explosion limit | 1,7 Vol-% |
| | Flash point (°C) | 12 °C |

| parameter | Method - source - remark |
|--|--------------------------|
| Auto-ignition temperature | not determined |
| Decomposition temperature | not determined |
| pH | not determined |
| Soluble (g/L) in | not determined |
| Fat solubility | not determined |
| Water solubility | complete miscible |
| Partition coefficient: n-octanol/water | not determined |
| Vapour pressure | not determined |
| Vapour density | not determined |
| Relative density | not determined |
| particle characteristics | not determined |

9.2 Other information

Solvent content

Value 65 %

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

No information available.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

In case of warming:

Danger of bursting container.

In case of shock or pressure:

Danger of bursting container.

In cases of exceeding the storage temperature:

Danger of bursting container.

10.5 Incompatible materials

Materials to avoid

Gas/vapours, flammable.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity****Acute oral toxicity** >5000 mg/kg**Effective dose**

ATEmix calculated:

Species:

Rat.

Exposure time: 48 h

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity****Acute Daphnia toxicity** >10 mg/L**Effective dose:**

EC50:

Exposure time: 48 h**12.2 Persistence and degradability**

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effectsNo information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Directive 2008/98/EC (Waste Framework Directive)****Before intended use****Waste code product** 070699**hazardous waste** No**Waste name**

wastes not otherwise specified

After intended use**Waste code packaging** 070699**hazardous waste** No**Waste name**wastes not otherwise specified

SECTION 14: Transport information

| | Land transport (ADR/RID) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|--|------------------------------------|------------------------------------|---|
| 14.1 UN-No. | 1950 | 1950 | 1950 |
| 14.2 Proper Shipping Name | AEROSOLS (n-PROPANOL, ISOPROPANOL) | AEROSOLS (n-PROPANOL, ISOPROPANOL) | Aerosols, flammable (n-PROPANOL, ISOPROPANOL) |
| 14.3 Class(es) | 2 | 2.1 | 2.1 |
| 14.4 Packing group | | | |
| 14.5 ENVIRONMENTALLY HAZARDOUS | No | No | No |
| 14.6 Special precautions for user | not applicable | not applicable | not applicable |
| 14.7 Maritime transport in bulk according to IMO instruments | not applicable | not applicable | not applicable |

Additional information - Land transport (ADR/RID)

| | |
|-------------------------|-----|
| Hazard label(s) | 2.1 |
| Classification code | 5F |
| Limited quantity (LQ) | 1 L |
| tunnel restriction code | D |
| transport category | 2 |

Additional information - Air transport (ICAO-TI / IATA-DGR)

| | |
|-----------------------|----|
| Limited quantity (LQ) | 30 |
|-----------------------|----|

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU legislation****Other regulations (EU)****Regulation 96/82/EC for danger control following severe accidents with dangerous substances:**

96/82/EG, annex I, part 2: Observe quantity limits according to R-phrases.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds**Volatile organic compounds (VOC) in percentage by weight: 65 weight-%****15.2 Chemical Safety Assessment**

No data available

SECTION 16: Other information**Indication of changes**

2021/09: Änderungen 2, 7, 13



Key literature references and sources for data

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.