

Print date 05.12.2019
Revision date 02.12.2019

Version 10.2

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

#### 1.1 Product identifier

Trade name/designation GREEN&CLEAN IK

INDEX no. UFI: 9410-X0YK-1006-EDH2

## 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
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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

## 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



**GREEN&CLEAN IK** 

Print date 05.12.2019 Revision date 02.12.2019

Version 10.2







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/eve protection/face protection.

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 .

#### **Product identifiers**

Propan-2-ol

Propan-1-ol

2-Butanol

#### 2.3 Other hazards

No data available

## **SECTION 3: Composition / information on ingredients**

#### 3.1/3.2 Substances/Mixtures

## Hazardous ingredients

propan-2-ol

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

25 %



**GREEN&CLEAN IK** 

Print date 05.12.2019 Revision date 02.12.2019 Version 10.2

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.

## After 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.



Print date 05.12.2019
Revision date 02.12.2019
Version 10.2

## **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 - 50 °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/m³ 200 ppm	625 mg/m³ 250 ppm	
(7. (2. 0	P 2 . 1	000	1250 /3 500	Great Britain (UK)
67-63-0	Propan-2-ol	999 mg/m³ 400 ppm	1250 mg/m <sup>3</sup> 500 ppm	
				Great Britain (UK)



Print date 05.12.2019 Revision date 02.12.2019

Version 10.2

 CAS No.
 Substance name
 LTV
 STV
 remark

 78-92-2
 Butan-2-ol
 308 mg/m³ 100 ppm
 462 mg/m³ 150 ppm

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
pH		not determined
Melting point/freezing point		not determined
Initial boiling point and boiling range		not determined
Flash point (°C)	12 °C	
Evaporation rate		not determined
flammability		not determined
Upper explosion limit	17,5 Vol-%	
lower explosion limit	1,7 Vol-%	
Vapour pressure		not determined



Print date 05.12.2019
Revision date 02.12.2019

Version 10.2

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



Print date 05.12.2019 Revision date 02.12.2019

Version 10.2

**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 effects

No information available.

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

## Appropriate disposal / Product

Waste disposal according to official state regulations.

Waste code packaging 150101

hazardous waste No

Waste name

paper and cardboard packaging

Waste code product 150104

hazardous waste No

Waste name

metallic packaging

## **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



Print date 05.12.2019
Revision date 02.12.2019
Version 10.2

Land transport (ADR/RID) Sea transport (IMDG) Air transport (ICAO-TI / IATA-DGR)

14.4 Packing group

14.5 ENVIRONMENTALLY No No No No

HAZARDOUS

14.6 Special precautions for user not applicable not applicable not applicable

14.7 Transport in bulk according to not applicable not applicable not applicable

Annex II of MARPOL 73/78 and the

IBC Code

## Additional information - Land transport (ADR/RID)

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 Wt %

15.2 Chemical Safety Assessment

No data available

#### **SECTION 16: Other information**

#### Recommended restrictions of use:

#### Remark:

Do not use in houshold. Do not use for inflating balloons.

## **Indication of changes**

update Dez 2019: Sebastian Geiger

## 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.