

Page 1 of 19
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 12.03.2019 / 0001
Replacing version dated / version: 12.03.2019 / 0001
Valid from: 12.03.2019
PDF print date: 13.03.2019
JM SkinDisinfect liquid

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

JM SkinDisinfect liquid

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

Relevant identified uses of the substance or mixture:

Biocide
Disinfectant

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

JM-Metzger GmbH, Nordstraße 45, D-74219 Möckmühl, Germany
Phone:+49 (0) 6298 93770-00, Fax:+49 (0) 6298 937 70 77
info@jm-metzger.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 700 / 24 112 112 (JMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)

Hazard class	Hazard category	Hazard statement
Flam. Liq.	2	H225-Highly flammable liquid and vapour.
Eye Dam.	1	H318-Causes serious eye damage.
STOT SE	3	H336-May cause drowsiness or dizziness.

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid



Danger

H225-Highly flammable liquid and vapour. H318-Causes serious eye damage. H336-May cause drowsiness or dizziness.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children.
 P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261-Avoid breathing vapours or spray. P271-Use only outdoors or in a well-ventilated area. P280-Wear eye 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.
 P403+P233-Store in a well-ventilated place. Keep container tightly closed. P405-Store locked up.
 P501-Dispose of contents / container to an approved waste disposal facility.

Propan-1-ol

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
 The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a.

3.2 Mixture

Propan-1-ol	
Registration number (REACH)	01-2119486761-29-XXXX
Index	603-003-00-0
EINECS, ELINCS, NLP	200-746-9
CAS	71-23-8
content %	45,09
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Eye Dam. 1, H318 STOT SE 3, H336

Ethanol	
Registration number (REACH)	Substance with specific conc. limit(s) acc. to REACH-registration
Index	---
EINECS, ELINCS, NLP	603-002-00-5
CAS	200-578-6
content %	64-17-5
	29,37-31,25

Page 3 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225 Eye Irrit. 2, H319
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Citric acid monohydrate	
Registration number (REACH)	01-2119457026-42-XXXX
Index	---
EINECS, ELINCS, NLP	201-069-1
CAS	5949-29-1
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP)	Eye Irrit. 2, H319

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
 The substances named in this section are given with their actual, appropriate classification!
 For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!
 Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.
 Supply person with fresh air and consult doctor according to symptoms.
 If the person is unconscious, place in a stable side position and consult a doctor.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact

Remove contact lenses.
 Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.
 Protect uninjured eye.
 Follow-up examination by an ophthalmologist

Ingestion

Rinse the mouth thoroughly with water.
 Do not induce vomiting - give copious water to drink. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
 In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray / alcohol resistant foam / CO2 / dry extinguisher

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Toxic gases

Page 4 of 19
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 12.03.2019 / 0001
Replacing version dated / version: 12.03.2019 / 0001
Valid from: 12.03.2019
PDF print date: 13.03.2019
JM SkinDisinfect liquid

Explosive vapour/air or gas/air mixtures.

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep unprotected persons away.
Remove possible causes of ignition - do not smoke.
Ensure sufficient supply of air.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.
Fill the absorbed material into lockable containers.
Flush residue using copious water.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.
Avoid inhalation of the vapours.
Keep away from sources of ignition - Do not smoke.
Take measures against electrostatic charging, if appropriate.
Avoid contact with eyes.
Avoid long lasting or intensive contact with skin.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.
Store product closed and only in original packing.
Not to be stored in gangways or stair wells.
Observe special storage conditions.

Page 5 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

Do not store with flammable or self-igniting materials.
 Protect from direct sunlight and warming.
 Store in a well ventilated place.
 Store cool.
 Store in a dry place.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	Propan-1-ol		Content %:45,09
WEL-TWA: 200 ppm (500 mg/m ³)	WEL-STEL: 250 ppm (625 mg/m ³)	---	
Monitoring procedures:	DFG (D) (Lösungsmittelgemische 6), DFG (E) (Solvent mixtures 6) - 1996, - 1997 - EU project BC/CEN/ENTR/000/2002-16 card 69-2 (2004) - Draeger - Alcohol 100/a (CH 29 701)		
BMGV: ---	Other information: Sk		

Chemical Name	Ethanol		Content %:29,37-31,25
WEL-TWA: 1000 ppm (1920 mg/m ³)	WEL-STEL: ---	---	
Monitoring procedures:	- Compur - KITA-104 SA (549 210) - Draeger - Alcohol 25/a Ethanol (81 01 631) DFG (D) (Lösungsmittelgemische), Methode Nr. 6 DFG (E) (Solvent mixtures) - - 1998, 2002 - EU project BC/CEN/ENTR/000/2002-16 card 63-2 (2004)		
BMGV: ---	Other information: ---		

Propan-1-ol						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	10	mg/l	
	Environment - marine		PNEC	1	mg/l	
	Environment - sediment, freshwater		PNEC	22,8	mg/kg	
	Environment - sediment, marine		PNEC	2,28	mg/kg	
	Environment - soil		PNEC	2,2	mg/kg	
	Environment - sewage treatment plant		PNEC	96	mg/l	
	Environment - sporadic (intermittent) release		PNEC	10	mg/l	
Consumer	Human - dermal	Long term, systemic effects	DNEL	81	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	80	mg/m ³	
Consumer	Human - oral	Long term, systemic effects	DNEL	61	mg/kg bw/d	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	1036	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	136	mg/kg bw/d	

Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	268	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	1723	mg/m3	

Ethanol						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,96	mg/l	
	Environment - marine		PNEC	0,79	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	2,75	mg/l	
	Environment - sewage treatment plant		PNEC	580	mg/l	
	Environment - sediment, freshwater		PNEC	3,6	mg/kg	
	Environment - soil		PNEC	0,63	mg/kg dry weight	
	Environment - oral (animal feed)		PNEC	0,72	mg/kg feed	
	Environment - sediment, marine		PNEC	2,9	mg/kg dry weight	
Consumer	Human - dermal	Short term, local effects	DNEL	950	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	114	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	87	mg/kg	
Consumer	Human - dermal	Long term, systemic effects	DNEL	206	mg/kg bw/d	
Consumer	Human - inhalation	Short term, local effects	DNEL	950	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	343	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	950	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	1900	mg/m3	

Citric acid monohydrate						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,44	mg/l	
	Environment - marine		PNEC	0,044	mg/l	
	Environment - sewage treatment plant		PNEC	1000	mg/l	
	Environment - sediment, freshwater		PNEC	34,6	mg/kg dry weight	
	Environment - sediment, marine		PNEC	3,46	mg/kg dry weight	
	Environment - soil		PNEC	33,1	mg/kg dry weight	

Page 7 of 19
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 12.03.2019 / 0001
Replacing version dated / version: 12.03.2019 / 0001
Valid from: 12.03.2019
PDF print date: 13.03.2019
JM SkinDisinfect liquid

GHS WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).
(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. BS EN 14042.
BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Normally not necessary.
With long-term contact:
Protective gloves in butyl rubber (EN 374).
Protective Neoprene® / polychloroprene gloves (EN 374).
Protective nitrile gloves (EN 374)
Minimum layer thickness in mm:
0,5
Permeation time (penetration time) in minutes:
480
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.
Protective hand cream recommended.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
If OES or MEL is exceeded.
Gas mask filter A (EN 14387), code colour brown
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.

Page 8 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents. Selection of materials derived from glove manufacturer's indications. Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer. In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless, Transparent
Odour:	Alcoholic
Odour threshold:	Not determined
pH-value:	2,6-2,8
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	>35 °C
Flash point:	<23 °C
Evaporation rate:	Not determined
Flammability (solid, gas):	n.a.
Lower explosive limit:	Not determined
Upper explosive limit:	Not determined
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,86-0,88 g/ml
Bulk density:	n.a.
Solubility(ies):	Not determined
Water solubility:	Mixable
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	Product is not explosive. When using: development of explosive vapour/air mixture possible.
Oxidising properties:	No

9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

Page 9 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

Heating, open flame, ignition sources
 Electrostatic charge

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

JM SkinDisinfect liquid						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Propan-1-ol						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	8000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	4032	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	> 33,8	mg/l	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Dam. 1
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:						Negative

Page 10 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

Symptoms:						respiratory distress, drowsiness, unconsciousness, coughing, headaches, intoxication, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.
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Ethanol						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	10470	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	124,7	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)	Negative
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:					OECD 475 (Mammalian Bone Marrow Chromosome Aberration Test)	Negative
Carcinogenicity:	NOAEL	>3000	mg/kg	Rat	OECD 451 (Carcinogenicity Studies)	24 mon
Reproductive toxicity:	NOAEL	5200	mg/kg bw/d	Rat		
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAL	>20	mg/l	Rat	OECD 403 (Acute Inhalation Toxicity)	Male
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	1730	mg/kg/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Female

Page 11 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

Aspiration hazard:				Human being		No indications of such an effect.
Symptoms:						respiratory distress, drowsiness, unconsciousness, drop in blood pressure, vomiting, coughing, headaches, intoxication, drowsiness, mucous membrane irritation, dizziness, nausea
Experiences in humans:						Excessive alcohol consumption during pregnancy induces the foetus alcohol syndrome (reduced weight at birth, physical and mental disorders)., There is no sign that this syndrome is also caused by dermal or inhalative absorption.

Citric acid monohydrate						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	3000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		
Skin corrosion/irritation:						Not irritant
Respiratory or skin sensitisation:						Not sensitising
Germ cell mutagenicity:					(Ames-Test)	Negative
Symptoms:						vomiting, cornea opacity, coughing, stomach pain, mucous membrane irritation

Page 12 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	1200	mg/kg	Rat		
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SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

JM SkinDisinfect liquid

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.

Propan-1-ol

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Other information:	H (Henry)		0,177				
Other information:	Log Koc		0,633				
12.1. Toxicity to fish:	LC50	96h	4555	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	3644	mg/l	Daphnia magna	DIN 38412 T.11	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	>100	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	Analogous conclusion
12.1. Toxicity to algae:	NOEC/NOEL	48h	1150	mg/l	Selenastrum capricornutum		
12.1. Toxicity to algae:	EC50	48h	9170	mg/l	Pseudokirchnerie lla subcapitata		
12.2. Persistence and degradability:		20d	75	%		OECD 301 D (Ready Biodegradability - Closed Bottle Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	83-92	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		0,2-0,34				Bioaccumulation is unlikely (LogPow < 1).

Page 13 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC50	3h	>1000	mg/l	activated sludge	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	
Toxicity to bacteria:	EC50	3h	>1000	mg/l	Pseudomonas putida	OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation))	References
Other information:	AOX		0	%			Does not contain any organically bound halogens which can contribute to the AOX value in waste water. DIN EN 1482

Ethanol							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative potential:	Log Pow		-0,32				Bioaccumulation is unlikely (LogPow < 1).
12.1. Toxicity to daphnia:	NOEC/NOEL	10d	9,6	mg/l	Ceriodaphnia spec.		
12.1. Toxicity to fish:	LC50	96h	13000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	LC50	48h	12340	mg/l	Daphnia magna		
12.2. Persistence and degradability:			97	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.3. Bioaccumulative potential:	BCF		0,66 - 3,2				
12.1. Toxicity to algae:	EC50	72h	275	mg/l	Chlorella vulgaris	OECD 201 (Alga, Growth Inhibition Test)	
Other organisms:	NOEC/NOEL		280	mg/l	Lemna gibba	OECD 201 (Alga, Growth Inhibition Test)	

Page 14 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.4. Mobility in soil:	H (Henry)		0,000138				
Toxicity to bacteria:			440	mg/l			
Other information:	COD		1,9	g/g			
Other information:	BOD5		1	g/g			

Citric acid monohydrate							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	440-760	mg/l	Leuciscus idus	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	72h	120	mg/l	Daphnia magna		
12.1. Toxicity to algae:	IC5	7d	640	mg/l	Scenedesmus quadricauda		Anhydrous substance
12.2. Persistence and degradability:		28d	97	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.2. Persistence and degradability:		28d	98	%		OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		<1				Bioaccumulation is unlikely (LogPow < 1).
Toxicity to bacteria:	EC50		>10000	mg/l	Pseudomonas subspicata	DIN 38412 T.8	
Other information:	COD		665	mg/g			
Other information:	BOD5		481	mg/g			

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

07 06 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Untampered packaging can be recycled.

Page 15 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

Dispose of packaging that cannot be cleaned in the same manner as the substance.
 Do not perforate, cut up or weld uncleaned container.
 Residues may present a risk of explosion.

SECTION 14: Transport information

General statements

14.1. UN number: 1987

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:
 UN 1987 ALCOHOLS, N.O.S. (N-PROPANOL,ETHANOL) (SPECIAL PROVISION 640D)
 14.3. Transport hazard class(es): 3
 14.4. Packing group: II
 Classification code: F1
 LQ: 1 L
 14.5. Environmental hazards: Not applicable
 Tunnel restriction code: D/E



Transport by sea (IMDG-code)

14.2. UN proper shipping name:
 ALCOHOLS, N.O.S. (N-PROPANOL,ETHANOL)
 14.3. Transport hazard class(es): 3
 14.4. Packing group: II
 EmS: F-E, S-D
 Marine Pollutant: n.a
 14.5. Environmental hazards: Not applicable



Transport by air (IATA)

14.2. UN proper shipping name:
 Alcohols, n.o.s. (N-PROPANOL,ETHANOL)
 14.3. Transport hazard class(es): 3
 14.4. Packing group: II
 14.5. Environmental hazards: Not applicable



14.6. Special precautions for user

Persons employed in transporting dangerous goods must be trained.
 All persons involved in transporting must observe safety regulations.
 Precautions must be taken to prevent damage.

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

Freighted as packaged goods rather than in bulk, therefore not applicable.
 Minimum amount regulations have not been taken into account.
 Danger code and packing code on request.
 Comply with special provisions.

SECTION 15: Regulatory information

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

Observe restrictions:
 Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements

Page 16 of 19
 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 12.03.2019 / 0001
 Replacing version dated / version: 12.03.2019 / 0001
 Valid from: 12.03.2019
 PDF print date: 13.03.2019
 JM SkinDisinfect liquid

P5c		5000	50000
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The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 76,7 %

Observe Regulation (EU) No 528/2012 concerning the placing of biocidal products on the market.

Additional data acc. to Art. 69 (2), Regulation (EU) No 528/2012 (Biocide products):

The identity of every active substance and its concentration in metric units:

Propan-1-ol

45,09 g/100 g

Ethanol

29,37 - 31,25 g/100 g

The uses:

Disinfection

Human hygiene

Biocidal product authorisation number (Regulation (EU) No. 528/2012):

n.d.a.

Observe incident regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: n.a.

Employee training in handling dangerous goods is required.

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Flam. Liq. 2, H225	Classification based on test data.
Eye Dam. 1, H318	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H225 Highly flammable liquid and vapour.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Flam. Liq. — Flammable liquid

Eye Dam. — Serious eye damage

STOT SE — Specific target organ toxicity - single exposure - narcotic effects

Eye Irrit. — Eye irritation

Any abbreviations and acronyms used in this document:

Page 17 of 19
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 12.03.2019 / 0001
Replacing version dated / version: 12.03.2019 / 0001
Valid from: 12.03.2019
PDF print date: 13.03.2019
JM SkinDisinfect liquid

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic

COD Chemical oxygen demand

CTFA Cosmetic, Toiletry, and Fragrance Association

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)

dw dry weight

e.g. for example (abbreviation of Latin 'exempli gratia'), for instance

EC European Community

ECHA European Chemicals Agency

EEA European Economic Area

EEC European Economic Community

EINECS European Inventory of Existing Commercial Chemical Substances

ELINCS European List of Notified Chemical Substances

EN European Norms

EPA United States Environmental Protection Agency (United States of America)

ERC Environmental Release Categories

ES Exposure scenario

etc. et cetera

EU European Union

EWG European Waste Catalogue

Fax. Fax number

gen. general

GHS Globally Harmonized System of Classification and Labelling of Chemicals

GWP Global warming potential

HET-CAM Hen's Egg Test - Chorionallantoic Membrane

HGWP Halocarbon Global Warming Potential

IARC International Agency for Research on Cancer

IATA International Air Transport Association

IBC Intermediate Bulk Container

Page 18 of 19
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 12.03.2019 / 0001
Replacing version dated / version: 12.03.2019 / 0001
Valid from: 12.03.2019
PDF print date: 13.03.2019
JM SkinDisinfect liquid

IBC (Code) International Bulk Chemical (Code)
IC Inhibitory concentration
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
LC lethal concentration
LC50 lethal concentration 50 percent kill
LCLo lowest published lethal concentration
LD Lethal Dose of a chemical
LD50 Lethal Dose, 50% kill
LDLo Lethal Dose Low
LOAEL Lowest Observed Adverse Effect Level
LOEC Lowest Observed Effect Concentration
LOEL Lowest Observed Effect Level
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute of Occupational Safety and Health (United States of America)
NOAEC No Observed Adverse Effective Concentration
NOAEL No Observed Adverse Effect Level
NOEC No Observed Effect Concentration
NOEL No Observed Effect Level
ODP Ozone Depletion Potential
OECD Organisation for Economic Co-operation and Development
org. organic
PAH polycyclic aromatic hydrocarbon
PBT persistent, bioaccumulative and toxic
PC Chemical product category
PE Polyethylene
PNEC Predicted No Effect Concentration
POCP Photochemical ozone creation potential
ppm parts per million
PROC Process category
PTFE Polytetrafluorethylene
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SADT Self-Accelerating Decomposition Temperature
SAR Structure Activity Relationship
SU Sector of use
SVHC Substances of Very High Concern
Tel. Telephone
ThOD Theoretical oxygen demand
TOC Total organic carbon
TRGS Technische Regeln für Gefahrstoffe (= Technical Regulations for Hazardous Substances)
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative

Page 19 of 19
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 12.03.2019 / 0001
Replacing version dated / version: 12.03.2019 / 0001
Valid from: 12.03.2019
PDF print date: 13.03.2019
JM SkinDisinfect liquid

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:

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