

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

1.1 Product identifier

Trade name/designation GREEN&CLEAN M2 GRÜN | GREEN | VERT | VERDE

INDEX no. UFI: 7300-V0PT-C008-G9H9

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

Relevant identified uses

Sector of uses [SU]

SU20 Health services.

Product categories [PC]

disinfectants

1.3 Details of the supplier of the safety data sheet

Manufacturer

METASYS Medizintechnik GmbH

Florianistrasse 3

Österreich-6063 Rum bei Innsbruck

Telephone: *43-512-205420

Telefax: *43-512-205420-7

E-mail: sebastian.geiger@metasys.com

Dept. responsible for information: DES/ 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

Hazards description

Hazard designation:

This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

2.1 Classification of the substance or mixture

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

health hazards

Acute Tox. 4

hazard statements for health hazards

H302 Harmful if swallowed.

health hazards

Skin Corr. 1C

hazard statements for health hazards

H314 Causes severe skin burns and eye damage.

health hazards

Resp. Sens. 1

hazard statements for health hazards

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Environmental hazards

Aquatic Acute 1

hazard statements for environmental hazards

H400 Very toxic to aquatic life.

2.2 Label elements

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

Hazard pictograms



GHS05



GHS07



GHS08



GHS09

Signal word

Danger

Hazard statements

hazard statements for health hazards

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Hazard statements for environmental hazards:

H400 Very toxic to aquatic life.

Precautionary statements

General:

P102 Keep out of reach of children.

Prevention:

P273 Avoid release to the environment.

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

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P342 + P311 Bei Symptomen der Atemwege: GIFTINFORMATIONSZENTRUM oder Arzt anrufen.

Product identifiers

Subtilisin

Diocetyl dimethylammoniumchlorid

Benzalkoniumchlorid

N-(-3-Aminopropyl)-N-docecylpropan-1,3,-diamin

2.3 Other hazards

No data available

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

Subtilisin	1 %
CAS 9014-01-1	
EC 232-752-2	
INDEX 647-012-00-8	
STOT SE 3, H335 / Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Resp. Sens. 1, H334	
edetic acid; (EDTA)	<5 %
CAS 60-00-4	
EC 200-449-4	
INDEX 607-429-00-8	
Eye Irrit. 2, H319	
Benzalkoniumchlorid	<6,5 %
CAS 61789-71-7	
EC 269-919-4	
Acute Tox. 4, H302 / Skin Corr. 1C, H314 / Aquatic Acute 1, H400	
Diocetyltrimethylammoniumchlorid	25 %
CAS 5538-94-3	
EC 226-901-0	
Acute Tox. 4, H302 / Skin Corr. 1C, H314 / Aquatic Acute 1, H400	
N-(3-Aminopropyl)-N-dodecylpropan-1,3,-diamin	4 %
CAS 2372-82-9	
EC 219-145-8	
Acute Tox. 3, H301 / Skin Corr. 1A, H314 / STOT RE 2, H373 / Aquatic Acute 1, H400	

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

Take off immediately all contaminated clothing.

Following inhalation

In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration. Provide fresh air. In case of inhaling spray mists, consult a doctor immediately and show him box or label.

Following skin contact

In case of skin irritation, seek medical treatment. After contact with skin, wash immediately with plenty of water and soap.

After eye contact

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After ingestion

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

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

Move undamaged containers from immediate hazard area if it can be done safely.

5.1 Extinguishing media

Suitable extinguishing media

Foam. Extinguishing powder. Atomized water.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Pyrolysis products, toxic.

Can be released in case of fire:

Nitrogen oxides (NO_x). Carbon monoxide.

5.3 Advice for firefighters

Special protective equipment for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Personal precautions

Wear personal protection equipment. Wear respiratory protection when in the presence of vapour, dust, and aerosols.

6.2 Environmental precautions

Do not empty into drains or the aquatic environment.

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 aerosol and dust generation

During filling, metering, mixing and sampling must be used:

Closed devices. Use closed proportioning device.

7.2 Conditions for safe storage, including any incompatibilities

Hints on joint storage

Storage class

Brennbare ätzende Stoffe (flüssig).

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
64-17-5	Ethanol	1920 mg/m ³	1000 ppm	
9014-01-1	Subtilisins (proteolytic enzymes as 100% pure crystalline enzyme)	0,00004 mg/m ³		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****Eye/face protection****Suitable eye protection:**

Tightly sealed safety glasses.

Skin protection**Suitable material:**

NBR (Nitrile rubber).

Breakthrough time (maximum wearing time) >480 min**Thickness of the glove material** 0,4 mm**additional hand protection measures**

Wear cotton undermitten if possible.

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**

liquid:

viscous

Colour

green

Odour

characteristic

	parameter	Method - source - remark
pH	11	
Melting point/freezing point		not determined
Initial boiling point and boiling range		not determined
Flash point (°C)	>63 °C	Flash point (°C):
Evaporation rate		not determined
flammability		not determined
Upper explosion limit		not determined
lower explosion limit		not determined
Vapour pressure		not determined
Vapour density		not determined
Relative density	1,05 g/cm ³	Temperature 20 °C
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
Dynamic viscosity	90 mPa*s	Temperature 25 °C
flow time		Newton.
Kinematic viscosity		not determined

9.2 Other information
Solvent content (%)
Value 2,9 %

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

No information available.

10.5 Incompatible materials

Materials to avoid

Acid.

10.6 Hazardous decomposition products

No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity 884 mg/kg

Effective dose

ATEmix calculated:

Species:

Rat.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) toxicity to crustacea 0,2 mg/L

Effective dose

EC50

species

Daphnia magna (Big water flea)

12.2 Persistence and degradability

Biodegradation

ingredient Dioctyldimethylammoniumchlorid

Degradation rate (%): <89 %

Method

OECD 303A

Assessment/classification

Biodegradable. not persistent.

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.

Appropriate disposal / Package

Cleaned containers may be recycled.

Waste code product 070699

hazardous waste No

Waste name

wastes not otherwise specified

remark

Remove according to the regulations.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN-No.	1903	1903	1903
14.2 Proper Shipping Name	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (DIOCTYLDIMETHYLAMMONIUMCHLORIDE, (N,N-BIS-(3-AMINOPROPYL) DODECYLAMINE)	DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (DIOCTYLDIMETHYLAMMONIUMCHLORIDE, (N,N-BIS-(3-AMINOPROPYL) DODECYLAMINE)	Disinfectant, liquid, corrosive, n.o.s. (DIOCTYLDIMETHYLAMMONIUMCHLORIDE, (N,N-BIS-(3-AMINOPROPYL) DODECYLAMINE)
14.3 Class(es)	8	8	8
14.4 Packing group	III	III	III
14.5 ENVIRONMENTALLY HAZARDOUS	Yes.	Yes.	Yes.
14.6 Special precautions for user	not applicable	not applicable	not applicable
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not applicable	not applicable	not applicable

Additional information - Land transport (ADR/RID)

Hazard label(s) 8
Classification code C9
Limited quantity (LQ) 5 L
Hazard identification number (Kemler No.) 80
tunnel restriction code E
transport category 3

Additional information - Sea transport (IMDG)

Marine pollutant Yes.

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

Limited quantity (LQ) 1

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.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this preparation were not carried out.

SECTION 16: Other information

Indication of changes

2019 Dez: check of data by 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.