

## safety data sheet

### to product

## GREEN&CLEAN M2 Einführungsset

### 1. Identification of the substance / preparation and company

#### Emergency number:

Tox Info Suisse, Freiestrasse 16, 8032 Zürich; Tox-Info Suisse: 145 (24h-operation); [info@toxinfo.ch](mailto:info@toxinfo.ch);  
**In case of emergency: Tel. 145;** (abroad: +41 44 251 51 51); information: +41 44 251 66 66

#### Company name:



abc dental ag

Gaswerkstrasse 6, 8952 Schlieren  
Tel. 044 755 51 00, Fax 044 755 51 01



Condor Dental Research CO Sàrl

Ch. des Cibleries 2, CP 300, 1896 Vouvry  
Tel. 024 482 61 61, Fax 024 482 61 69



Curaden AG Dentaldepot

Riedstrasse 12, 8953 Dietikon  
Tel. 041 319 45 00, Fax 041 319 45 90



dema dent AG

Furtbachstrasse 16, 8107 Buchs  
Tel. 044 838 65 65, Fax 044 838 65 66



Flexdental Services SA

Route de la Corniche 1, 1066 Epalinges  
Tel. 0848 336 825, Fax 021 907 67 02



Jordi Röntgentechnik AG

Dammstrasse 70, 4142 Münchenstein  
Tel. 061 417 93 93, Fax 061 417 93 94



Kaladent AG

Schachenstrasse 2, 9016 St. Gallen  
Tel. 071 282 80 80, Fax 071 282 80 81



Lometral AG

Binzenholzstrasse 20, 5704 Egliswil  
Tel. 062 775 05 05, Fax 062 775 33 07



Novadent AG

Sägereistrasse 17, 8152 Glattbrugg  
Tel. 044 880 20 20, Fax 044 811 04 40



Smart Dentist AG

Verenastrasse 4b, 8832 Wollerau  
Tel. 044 726 20 20, Fax 044 726 20 25

## 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

Diocetyltrimethylammoniumchlorid

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<sub>x</sub>). 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 <sup>3</sup>	1000 ppm	
9014-01-1	Subtilisins (proteolytic enzymes as 100% pure crystalline enzyme)	0,00004 mg/m <sup>3</sup>		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 <sup>3</sup>	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.