

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

1.1 Product identifier

Trade name/designation GREEN&CLEAN CL

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]

PC35 Washing and cleaning products (including solvent based products)

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:

The preparation is dangerous in the sense of Directive 1999/45/EC. 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 If experiencing respiratory symptoms: Call a POISON CENTER/doctor/.

Storage:

P405 Store locked up.

Product identifiers

Subtilisin

Alkyl polyethylene glycol ether

2.3 Other hazards

No data available

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

Enzyme based cleaning agent for dental evacuation systems and amalgam separators:

Hazardous ingredients

Alkyl polyethylene glycol ether CAS 69227-22-1 Acute Tox. 4, H302 / Eye Dam. 1, H318	<5 %
Protease CAS 9014-01-1 EC 232-752-2 Acute Tox. 4, H302 / Skin Irrit. 2, H315 / STOT SE 3, H335 / Eye Dam. 1, H318 / Resp. Sens. 1, H334 / Aquatic Acute 1, H400	1 %
Defoaming agents Acute Tox. 4, H302 / Skin Corr. 1A, H314	10 - 15 %
Lipase CAS 9001-62-1 EC 232-619-9 Resp. Sens. 1, H334	<1 %

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 0 - 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

orange

Odour

characteristic

	parameter	Method - source - remark
pH	11	
Melting point/freezing point		not determined
Initial boiling point and boiling range		not determined

	parameter	Method - source - remark
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	Newton.
flow time		not determined
Kinematic viscosity		not determined

9.2 Other information

Solvent content (%)

Value <3 %

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2 Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3 Possibility of hazardous reactions

not relevant

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

Materials to avoid

Acid.

10.6 Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity ca.1000 mg/kg

Effective dose

ATEmix calculated:

Species:

Rat.

SECTION 12: Ecological information

12.1 Toxicity

No information available.

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.

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.	3267	3267	3267

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.2 Proper Shipping Name	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ALKYL POLY GLYCOL ETHER)	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ALKYL POLY GLYCOL ETHER)	Corrosive liquid, basic, organic, n.o.s. (ALKYL POLY GLYCOL ETHER)
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	C7
Limited quantity (LQ)	5 L
Hazard identification number (Kemler No.)	80
tunnel restriction code	E
transport category	3

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

Limited quantity (LQ)	1
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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

Sebastian Geiger: Auf Stand EWG1272/2008

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.