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

1.1 Product identifier

Trade name/designation GREEN&CLEAN H1

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

Relevant identified uses

Sector of uses [SU]
SU20 Health services.

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
Department responsible for information: 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

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
Acute Tox. 4

hazard statements for health hazards
H312 Harmful in contact with skin.

health hazards
Skin Corr. 1B

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.

Classification procedure
Harmonised (legal) classification.

remark
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

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.
H312 Harmful in contact with skin.
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:
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

Prevention
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:
P301+ P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/or shower.
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/.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311 Bei Symptomen der Atemwege: GIFTINFORMATIONSZENTRUM oder Arzt anrufen.
P391 Collect spillage.

Disposal:
P501 Dispose of contents/container to an appropriate recycling or disposal facility.

Product identifiers
Subtilisin

Quartäre Ammoniumverbindungen, Benzyl-C8-18-alkyldimethyl, Chloride
Alkyl Polyglykolether C10-16 mit PO und EO

2.3 Other hazards
No data available

SECTION 3: Composition / information on ingredients

3.1/3.2 Substances/Mixtures

Hazardous ingredients

subtilisin <=6 %
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

quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides <=20 %
CAS 63449-41-2
EC 264-151-6
INDEX 612-140-00-5
Acute Tox. 4, H312 / Acute Tox. 4, H302 / Skin Corr. 1B, H314 / Aquatic Acute 1, H400

Alkyl Polyglykolether C10-16 mit PO und EO <=3 %
CAS 69227-22-1
Acute Tox. 4, H302 / Eye Dam. 1, H318

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.

Following ingestion
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

Notes for the doctor
Treat symptomatically.

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
Can be released in case of fire:
Ammonia. Nitrogen oxides (NOx). Carbon monoxide. Hydrogen chloride (HCl).

5.3 Advice for firefighters

Special protective equipment for firefighters
In case of fire: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

Methods for cleaning up
Suitable absorbing material:
Absorbing material, organic.
sand
Universal binding agent. sawdust. diatomaceous earth. Remove mechanically, placing in appropriate containers for disposal. Collect in closed containers for disposal.

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.

For emergency responders

Personal protection equipment
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2 Environmental precautions

Do not empty into drains or the aquatic environment.

6.3 Methods and material for containment and cleaning up

For containment

Suitable material for taking up:
Universal binder

For cleaning up

Suitable material for diluting or neutralizing:
Water

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.

7.2 Conditions for safe storage, including any incompatibilities

Hints on joint storage

Materials to avoid
Materials to avoid
Oxidizing agents.
Do not store together with:
Oxidizing agents.

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
9014-01-1	Subtilisins (proteolytic enzymes as 100% pure crystalline enzyme)	0,00004 mg/m³		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:
Avoid contact with skin, eye and clothing. Wash contaminated clothing prior to re-use. Take off immediately all contaminated clothing.

Eye/face protection

Suitable eye protection:
goggles

Recommended eye protection articles

DIN-/EN-Norms
DIN EN 165

Skin protection

Hand protection:

Hand protection
Tested protective gloves are to be worn:

Suitable material:
NBR (Nitrile rubber)

Required properties:
liquid-tight.

Thickness of the glove material 0,4 mm

Recommended glove articles

DIN-/EN-Norms
EN ISO 374

additional hand protection measures
Wear cotton undermitten if possible.

remark
Breakthrough times and swelling properties of the material must be taken into consideration.

Body protection:

Suitable protective clothing:
lab coat

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
blue

Odour
characteristic

	parameter	Method - source - remark
Melting point/freezing point		not determined
Boiling point or initial boiling point and boiling range		not determined
flammability		not determined
Upper explosion limit		not determined
lower explosion limit		not determined
Flash point (°C)	>63 °C	Flash point (°C):
Auto-ignition temperature		not determined

		parameter	Method - source - remark
Decomposition temperature			not determined
pH	ca.7	Concentration 10 g/L	
Kinematic viscosity			not determined
Water solubility			not determined
Soluble (g/L) in			not determined
Fat solubility			not determined
Partition coefficient: n-octanol/water			not determined
Vapour pressure			not determined
Density and/or relative density	1,01 g/cm³	Temperature 20 °C	
Relative vapour density			not determined
particle characteristics			not determined
Dynamic viscosity	120 mPa*s		
flow time			not determined

9.2 Other information

Solvent content

Value <1 %

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
No known hazardous reactions.

10.4 Conditions to avoid
No information available.

10.5 Incompatible materials
No information available.

10.6 Hazardous decomposition products
No information available.

SECTION 11: Toxicological information

General remarks
The statement is derived form the properties of the components.

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Acute oral toxicity >1000 mg/kg

Effective dose
LD50:

Species:
Rat.

Exposure time: 48 h

Respiratory or skin sensitisation

Skin sensitisation

Result / evaluation
sensitizing.

11.2 Information on other hazards
No information available.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute Daphnia toxicity =0,1 mg/L

Effective dose:
EC50:

Exposure time: =48 h

species:
Daphnia magna

Terrestrial toxicity

Effects on soil microorganisms

remark
No data 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
The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6 Endocrine disrupting properties
No information available.

12.7 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

remark
Remove according to the regulations.

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste code product 070699
hazardous waste No

Waste name
wastes not otherwise specified

After intended use

Waste code packaging 150102
hazardous waste No

Waste name
plastic packaging

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1 UN number or ID number	1760	1760	1760
14.2 Proper Shipping Name	CORROSIVE LIQUID, N.O.S. (QUATERNARY AMMONIUM COMPOUND)	CORROSIVE LIQUID, N.O.S. (QUATERNARY AMMONIUM COMPOUND)	Corrosive liquid, n.o.s. (QUATERNARY AMMONIUM COMPOUND)
14.3 Class(es)	8	8	8
14.4 Packing group	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.
14.6 Special precautions for user	not applicable	not applicable	not applicable
14.7 Maritime transport in bulk according to IMO instruments	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.
Segregation group -

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.

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

Volatile organic compounds (VOC) in percentage by weight: 0 weight-%

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes
2022/06: Änderungen 3

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.