

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date: 19.10.2023

Version number 3 (replaces version 2)

Revision: 19.10.2023

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

· **1.1 Product identifier**

· **Trade name:** ECOLYT SG 100

· **Article number:**

77953441 = 8g Au/ 500ml

77953440 = 16g Au/1000ml

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

Not approved for private consumers.

· **Application of the substance / the mixture** Galvanic bath

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Heimerle + Meule GmbH

Dennigstrasse 16

D-75179 Pforzheim

Telefon +49 (0) 7231 940-0

Telefax +49 (0) 7231 940-2199

www.heimerle-meule.com

· **Further information obtainable from:**

Abteilung BASU - Bau/Arbeitssicherheit/Umwelt

Department BASU - Construction / Occupational Safety / Environment

sds@heimerle-meule.com

IATA - 24h Emergency Contact - IATA - 24h Emergency Contact -

(Dangerous goods emergency number)

+49 172 739 6970

· **1.4 Emergency telephone number:**

DEUTSCHLAND - GERMANY:

Vergiftungs-Informationen-Zentrale Freiburg, ++49 761 19240 (24 h)

(Poisoning Information Center)

GREAT BRITAIN:

National Poisons Information Service +44 121 507 4123

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111 - In Scotland: NHS 24 - dial 111

IRELAND

+353 1 809 2166 (7 Days 8 am -10 pm)

Healthcare Professionals: +353 1 809 2566

ITALY:

Istituto Superiore di Sanità (ISS) +3906499906140

Centro Antiveneni

Bergamo: +39 800 883300

Firenze +39 055 794 7819

Milano: +39 055 794 7819

Roma +39 06 68593726

Roma +39 06 49978000

Roma +39 06 3954343

KROATIA - REPUBLIKA HRVATSKA:

(+385) 01 2348 342

ESTLAND - ESTONIA:

Tervisemeti Mürgistusteabekeskuse

National (24/7): 16662

(+372) 7943 794

LETTLAND - LATVIA:

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Valsts Toksikoloģijas centrs, Saindēšanās un zāļu informācijas centrs,
(24h) 112
(24h) +371 67042473
LITAUEN - LIETUVOS RESPUBLIKA:
Poison Information Bureau (24/7), Tel.: +8 5 236 20 52
Apsinuodījumu informācijas biuras

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.

- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the GB CLP regulation.
- Hazard pictograms



GHS07

- Signal word *Warning*
- Hazard statements
H315 Causes skin irritation.
H319 Causes serious eye irritation.
- Precautionary statements
P264 Wash thoroughly after handling.
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.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.
- Additional information:
EUH031 Contact with acids liberates toxic gas.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

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· Dangerous components / Information on ingredients:		
CAS: 7783-11-1	sulfurous acid, diammonium salt, monohydrate ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5–7%
CAS: 71662-32-3 EINECS: 275-798-9	Ammonium disulfito aurate (I) solution ⚠ Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335 EUH031	≥1–≤7%
CAS: 7783-28-0 EINECS: 231-987-8 RTECS: TB 9375000	diammonium hydrogenorthophosphate ⚠ Acute Tox. 4, H312; Acute Tox. 4, H332	2.5–7%
CAS: 7664-41-7 EINECS: 231-635-3 Index number: 007-001-00-5 RTECS: BO 0875000	ammonia, anhydrous; anhydrous ammonia; Ammonia ⚠ Acute Tox. 3, H331 ⚠ Skin Corr. 1B, H314 ⚠ Aquatic Acute 1, H400 ⚠ Acute Tox. 4, H302 Flam. Gas 2, H221; Press. Gas (Comp.), H280 substance with a Community workplace exposure limit	≥0.1–<0.25%
CAS: 1336-21-6 EINECS: 215-647-6 Index number: 007-001-01-2	ammonia; ammonia solution ...%; ammonia, aqueous solution; Ammonium hydroxide ⚠ Skin Corr. 1B, H314 ⚠ Aquatic Acute 1, H400 Specific concentration limit: STOT SE 3; H335: C ≥ 5 % substance with a Community workplace exposure limit	≥0.1–<0.25%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:**

Take affected persons out into the fresh air.

Immediately remove any clothing soiled by the product.

Involve doctor immediately.

Personal protection for the First Aider.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:**

Drink plenty of water and provide fresh air. Call for a doctor immediately.

A person vomiting while laying on their back should be turned onto their side.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **For safety reasons unsuitable extinguishing agents:** Water with full jet

· 5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

Sulphur dioxide (SO₂)

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*Ammonia (NH₃)**Phosphorus oxides (P₂O_x)***· 5.3 Advice for firefighters****· Protective equipment:**

Beware: Filter masks provide protection for a short period of time only. They should only be used in exceptional cases, that is if a small amount of the substance has spilled out or in order to fight spillages and fire



Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures*Ensure adequate ventilation**Wear protective clothing.**Wear protective equipment. Keep unprotected persons away.**Use respiratory protective device against the effects of fumes/dust/aerosol.**Only handle and refill product in closed systems.***· 6.2 Environmental precautions:***Dilute with plenty of water.**Do not allow to enter sewers/ surface or ground water.***· 6.3 Methods and material for containment and cleaning up:***Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).***· 6.4 Reference to other sections***See Section 7 for information on safe handling.**See Section 8 for information on personal protection equipment.**See Section 13 for disposal information.*

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling*Keep receptacles tightly sealed.**the usual precautionary measures are to be adhered to when handling chemicals.**Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.**Do not dry clean dust covered objects and floors. Wash thoroughly with plenty of water.***· Information about fire - and explosion protection: No special measures required.****· 7.2 Conditions for safe storage, including any incompatibilities****· Storage:****· Requirements to be met by storerooms and receptacles:***Observe official regulations on storing packagings .**Observe official regulations on storing packagings .**Prevent any seepage into the ground.***· Information about storage in one common storage facility:***Do not store together with acids.**Store away from foodstuffs.***· Further information about storage conditions:***Protect from frost.**Keep container tightly sealed.***· Storage class: 12**

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· 7.3 **Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· **Ingredients with limit values that require monitoring at the workplace:**

CAS: 7664-41-7 ammonia, anhydrous

WEL (Great Britain)	Short-term value: 25 mg/m ³ , 35 ppm Long-term value: 18 mg/m ³ , 25 ppm
IOELV (European Union)	Short-term value: 36 mg/m ³ , 50 ppm Long-term value: 14 mg/m ³ , 20 ppm
AGW (Germany)	Long-term value: 14 mg/m ³ , 20 ppm 2(I);DFG, EU, Y

CAS: 1336-21-6 ammonia

AGW (Germany)	Long-term value: 14 mg/m ³ , 20 ppm 2(I);DFG, EU, Y
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· **Regulatory information**

WEL (Great Britain): EH40/2020

IOELV (European Union): (EU) 2019/1831

AGW (Germany): TRGS 900

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.· **Individual protection measures, such as personal protective equipment**· **General protective and hygienic measures:**

Avoid contact with the eyes and skin.

Immediately remove all soiled and contaminated clothing

The usual precautionary measures are to be adhered to when handling chemicals.

Do not inhale gases / fumes / aerosols.

· **Respiratory protection:**

Not necessary if room is well-ventilated.

Use suitable respiratory protective device only when aerosol or mist is formed.

Beware: Filter masks provide protection for a short period of time only. They should only be used in exceptional cases, that is if a small amount of the substance has spilled out or in order to fight spillages and fire.

· **Recommended filter device for short term use:**

according to EN 14387/ EN 143

Combination filter B-P2

· **Hand protection**

Sensibilisation by the components in the glove materials is possible.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Prior to working with gloves the rubbing in with tanniferous skin-protecting agents for the avoidance of skin softening due to perspiration is recommended.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Natural rubber, NR

Recommended thickness of the material: ≥ 0.5 mm· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye/face protection**

Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**

· Physical state	Fluid
· Colour:	Colourless
· Odour:	Like ammoniac
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	~100°C (~212°F)
· Flammability	Not applicable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	Not applicable.
· Decomposition temperature:	Not determined.
· pH at 20°C (68°F)	8.8
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density at 20°C (68°F):	1.07 g/cm ³ (8.93 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.

· **9.2 Other information** 0.00 %· **Appearance:**· **Form:** Fluid· **Important information on protection of health and environment, and on safety.**· **Ignition temperature:**

Product is not selfigniting.

· **Explosive properties:**

Product does not present an explosion hazard.

· **Change in condition**· **Evaporation rate**

Not determined.

· **Information with regard to physical hazard classes**· **Explosives**

Void

· **Flammable gases**

Void

· **Aerosols**

Void

· **Oxidising gases**

Void

· **Gases under pressure**

Void

· **Flammable liquids**

Void

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· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Contact with acids releases toxic gases.
Reacts with acids, alkalis and oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Acids
- **10.6 Hazardous decomposition products:**
Phosphorus oxides (e.g. P₂O₅)
Sulphur dioxide
Ammonia

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

ATE (Acute Toxicity Estimates)

Dermal	LD50	36,667 mg/kg
Inhalative	LC50/4 h	50 mg/l

CAS: 7783-28-0 diammonium hydrogenorthophosphate

Dermal	LD50	1,100 mg/kg (ATE)
Inhalative	LC50/4 h	1.5 mg/l (ATE)

CAS: 7664-41-7 ammonia, anhydrous

Oral	LD50	350 mg/kg (rat)
Inhalative	LC50/4 h	2,000 mg/l (rat)

- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye irritation.
- **11.2 Information on other hazards**

· **Endocrine disrupting properties**

None of the ingredients is listed.

GB

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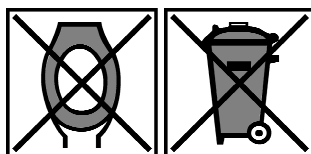
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SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties**
The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:** Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact manufacturer for recycling information.

- **Waste disposal key:**
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.
- **Uncleaned packaging:**
- **Recommendation:**
Disposal must be made according to official regulations.
Packaging which is uncleaned or soiled with product remains is to be treated like the product itself
Packaging free of product remains is to be supplied refuse for recycling. Only if no adequate collecting system is available, they may be disposed of through the domestic rubbish
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- | | |
|---|------|
| · 14.1 UN number or ID number
· ADR, ADN, IMDG, IATA | Void |
| · 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA | Void |
| · 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class | Void |
| · 14.4 Packing group
· ADR, IMDG, IATA | Void |

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· **14.5 Environmental hazards:**· **Marine pollutant:** No· **14.6 Special precautions for user** Not applicable.· **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.· **Transport/Additional information:**· **IATA**· **Remarks:**24h emergency contact -
(Dangerous goods emergency number)

+49 172 739 6970

· **UN "Model Regulation":** Void* **SECTION 15: Regulatory information**· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

COUNCIL DIRECTIVE 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)

DIRECTIVE 2012/18/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

· **GADSL - Global Automotive Declarable Substance List**

CAS: 7758-99-8 | Copper(II)sulphate-Pentahydrat

D/P(LR)

· **Directive 2012/18/EU**· **Named dangerous substances - ANNEX I** None of the ingredients is listed.· **National regulations:**· **Waterhazard class:** .· **Other regulations, limitations and prohibitive regulations -**· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.* **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

· **Reasons for revise**

If necessary, this safety data sheet can be revised according to legal guidelines.

Our current version for your reference is available on our website
www.heimerle-meule.com

· **Relevant phrases**

H221 Flammable gas.

H280 Contains gas under pressure; may explode if heated.

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H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H331 Toxic if inhaled.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H400 Very toxic to aquatic life.
 EUH031 Contact with acids liberates toxic gas.

· Department issuing SDS:

Abteilung BASU - Bau/Arbeitssicherheit/Umwelt
 Department BASU - Construction / Occupational Safety / Environment

sds@heimerle-meule.com

· Contact:

Herr Thomas Knuth
 thomas.knuth@heimerle-meule.com
 sds@heimerle-meule.com

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
 ICAO: International Civil Aviation Organisation
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
 AwSV: Ordinance on facilities for handling water-polluting substances (German regulation).
 TRGS: Technical rules for hazardous substances (German regulation)
 ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
 LC50: Lethal concentration, 50 percent
 LD50: Lethal dose, 50 percent
 PBT: Persistent, Bioaccumulative and Toxic
 vPvB: very Persistent and very Bioaccumulative
 Flam. Gas 2: Flammable gases – Category 2
 Press. Gas (Comp.): Gases under pressure – Compressed gas
 Acute Tox. 4: Acute toxicity – Category 4
 Acute Tox. 3: Acute toxicity – Category 3
 Skin Corr. 1B: Skin corrosion/irritation – Category 1B
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
 Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

· * Data compared to the previous version altered.