

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

Printing date 14.05.2024

Version number 47 (replaces version 46)

Revision: 14.05.2024

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

· **1.1 Product identifier**

· **Product name: Ammonia No.1**

· **Catalog number:** 00512581, 512580BT, 512581BT, SDT245, 00512589BT, 00512580BT

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

· **Application of the substance / the preparation:** Reagent for water analysis

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

· **Supplier:**

Tintometer GmbH
Schleefstraße 8-12
44287 Dortmund
Made in Germany
www.lovibond.com

phone: +49 (0)231 94510-0
e-mail: sales@lovibond.com

The Tintometer Limited
Lovibond® House
Sun Rise Way
Amesbury
Wiltshire SP4 7GR
United Kingdom

phone : +44 1980 664800
e-mail: SDS@lovibond.uk

· **Informing department:**

e-mail: sds@lovibond.com
Product Safety Department

· **1.4 Emergency telephone number:**

+44 1235 239670
Languages: English

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Repr. 2 H361d Suspected of damaging the unborn child.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the GB CLP regulation.

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Hazard pictograms

GHS05 GHS07 GHS08

Signal word Danger**Hazard-determining components of labelling:**salicylic acid
sodium nitroprusside dihydrate**Hazard statements**H302 Harmful if swallowed.
H318 Causes serious eye damage.
H361d Suspected of damaging the unborn child.**Precautionary statements**P280 Wear protective gloves/protective clothing/eye protection.
P201 Obtain special instructions before use.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.**2.3 Other hazards** No further relevant information available.**Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

Determination of endocrine-disrupting properties

CAS: 69-72-7 salicylic acid List II; III 20–30%

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Mixture of organic and inorganic compounds**Dangerous components:**

CAS: 69-72-7 EINECS: 200-712-3 Index No: 607-732-00-5	salicylic acid ⚠ Repr. 2, H361d; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	20–30%
CAS: 13755-38-9 EINECS: 238-373-9	sodium nitroprusside dihydrate ⚠ Acute Tox. 3, H301	2.5–5%

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** Instantly remove any clothing soiled by the product.**After inhalation** Supply fresh air and call for doctor for safety reasons.**After skin contact**Instantly rinse with water.
Get medical advice/attention.**After eye contact**Rinse opened eye for several minutes (at least 15 min) under running water.
Call a doctor immediately.**After swallowing**Rinse out mouth and then drink 1-2 glasses of water.
Seek medical treatment.**4.2 Most important symptoms and effects, both acute and delayed:**irritations
after inhalation:
mucous membrane irritation
coughing

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breathing difficulty
 after swallowing:
 absorption
 sickness
 vomiting
 dizziness
 after absorption of large amounts:
 cardiovascular disorders
 drop in blood pressure
 cramps

· Danger

Danger of system failure.
 Danger of disturbed cardiac rhythm.

· **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** Use fire fighting measures that suit the environment.

· **5.2 Special hazards arising from the substance or mixture**

The product is not combustible.
 Formation of toxic gases is possible during heating or in case of fire.
 Can be released in case of fire:

nitrous gases
 Hydrogen chloride (HCl)
 Hydrogen cyanide (HCN)
 Dipotassium oxide
 Sodium monoxide

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear self-contained breathing apparatus.
 Wear full protective suit.

· **Additional information**

Collect contaminated fire fighting water separately. It must not enter drains.
 Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
 Ambient fire may liberate hazardous vapours.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**

· **Advice for non-emergency personnel:**

Wear protective equipment. Keep unprotected persons away.
 Avoid substance contact.
 Ensure adequate ventilation

· **Advice for emergency responders:** Protective equipment: see section 8

· **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.

· **6.3 Methods and material for containment and cleaning up:**

Ensure adequate ventilation.
 Collect mechanically.
 Dispose of contaminated material as waste according to item 13.

· **6.4 Reference to other sections**

See Section 8 for information on personal protection equipment.
 See Section 13 for information on disposal.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling**

· **Advice on safe handling:** Provide suction extractors if dust is formed.

· **Hygiene measures:**

Do not get in eyes, on skin, or on clothing.
 Take off immediately all contaminated clothing.

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Store protective clothing separately.

Wash hands during breaks and at the end of the work.

Do not eat, drink or smoke when using this product.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Requirements to be met by storerooms and containers:** Store in cool location.

- **Information about storage in one common storage facility:**

Do not store together with acids.

Store away from oxidising agents.

- **Further information about storage conditions:**

Store in a locked cabinet or with access restricted to technical experts or their assistants.

Protect from heat and direct sunlight.

Protect from the effects of light.

Store under dry conditions.

Protect from humidity and keep away from water.

- **Recommended storage temperature:** 20°C +/- 5°C

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

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

- **Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **8.2 Exposure controls**

- **Engineering measures:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See item 7.

- **Individual protection measures, such as personal protective equipment**

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.

- **Eye/face protection** Tightly sealed safety glasses.

- **Hand protection**

Protective gloves.

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves**

nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

- **Penetration time of glove material**

Value for the permeation: Level = 1 (< 10 min)

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

- **Other skin protection (body protection):** Protective work clothing.

- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.

- **Recommended filter device for short term use:** Filter P2

- **Environmental exposure controls** Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **Physical state**

Solid.

- **Form:**

Tablets

- **Colour:**

Red

- **Odour:**

Odourless

- **Odour threshold:**

Not applicable.

- **Melting point/Freezing point:**

Not determined.

- **Boiling point or initial boiling point and boiling range**

Not determined.

- **Flammability**

The product is not combustible.

- **Explosive properties:**

Product is not explosive.

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· Lower and upper explosion limit	
Lower:	Not applicable.
Upper:	Not applicable.
· Flash point:	Not applicable.
· Auto-ignition temperature:	Not applicable (solid).
· Decomposition temperature:	Not determined.
· pH (11.9 g/l) at 20°C	2.3
· Kinematic viscosity	Not applicable (solid).
· Solubility	
· Water:	Soluble
· Partition coefficient n-octanol/water (log value)	Not applicable (mixture).
· Vapour pressure:	Not applicable.
· Density and/or relative density	
· Density at 20°C:	1.83 g/cm ³
· Relative density:	Not determined.
· Relative gas density	Not applicable (solid).
· Particle characteristics	Not determined.
· 9.2 Other information	
· Information with regard to physical hazard classes	
· Corrosive to metals	Void
· Other safety characteristics	
· Oxidising properties:	none
· Additional information	
· Solids content:	100.0 %

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section 10.3
- **10.2 Chemical stability**
Stable at ambient temperature (room temperature).
sensitivity to light
- **10.3 Possibility of hazardous reactions**
Contact with acids releases toxic gases
Reacts with strong oxidizing agents
--> forms heat
- **10.4 Conditions to avoid** Strong heating (decomposition)
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
hydrogen cyanide (prussic acid HCN)
In case of fire: see section 5.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity**
Classification according to calculation procedure:
Harmful if swallowed.

· Acute toxicity estimate (ATE_(MX)) - Calculation method:		
Oral	CLP ATE _(MX)	1339 mg/kg (.)

· LD/LC50 values that are relevant for classification:		
CAS: 69-72-7 salicylic acid		
Oral	LD50	891 mg/kg (rat) (GESTIS)
Dermal	LD50	>2000 mg/kg (rat) (GESTIS)
Inhalative	LC ₀	>0.225 mg/l (rat) (4h (LC))
	LC50	>0.9 mg/l/1h (rat) (dust, aerosol) (Registrant, ECHA: no mortality at this dose)

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CAS: 13755-38-9 sodium nitroprusside dihydrate

Oral	LD50	99 mg/kg (rat) (RTECS, anhydrous substance)
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- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye damage.
Risk of corneal clouding.

· **Information on components:****CAS: 69-72-7 salicylic acid**

Irritation of skin	OECD 404	(rabbit: slight irritation) (IUCLID)
Irritation of eyes	OECD 492	(rabbit: severe irritations) (IUCLID)

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Information on components:**
CAS 69-72-7: Sensitization possible in predisposed persons.

CAS: 69-72-7 salicylic acid

Sensitisation	OECD 406	(negative) (IUCLID)
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- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Suspected of damaging the unborn child.
- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

· **Additional toxicological information:**

The following applies to cyanogen compounds/nitriles in general: Extreme caution! Hydrogen cyanide release possible - Blockage of cell respiration. Cardiovascular disorders, shortness of breath, unconsciousness.

CAS: 69-72-7 salicylic acid

(source: GESTIS)
Acute: Irritant to corrosive effect on the eyes, irritation of the skin and mucous membranes of the respiratory tract and mucous membranes of the respiratory tract
Effect on the respiratory centre, disturbance of basic metabolic processes and the central nervous system
Chronic: Disorders of the gastrointestinal tract

· **11.2 Information on other hazards**· **Endocrine disrupting properties**

CAS: 69-72-7	salicylic acid	List II; III	20–30%
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· **Other information**

Other dangerous properties can not be excluded.
According to the information available to us, the chemical, physical and toxicological properties of the substances mentioned in Chapter 3 have not been thoroughly investigated.

SECTION 12: Ecological information

· **12.1 Toxicity**· **Aquatic toxicity:****CAS: 69-72-7 salicylic acid**

LC50	0.685 mg/l/48h (fathhead minnow) (OECD 203) (Merck)
EC50	435 mg/l/24h (Daphnia magna) (OECD 202) (Merck)

CAS: 13755-38-9 sodium nitroprusside dihydrate

EC50	1 mg/l/24h (Daphnia magna)
LC50	0.05 mg/l (fish)

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Other information:

Toxic for fish:

the following applies to dissolved iron compounds in general:

toxic as from 0.9 mg/l at pH 6.5 - 7.5

lethal as from 1.0 mg/l at pH 5.5 - 6.7

12.2 Persistence and degradability**CAS: 69-72-7 salicylic acid**

OECD 301 C 88 % / 15 d (readily biodegradable) (Modified MITI Test)

12.3 Bioaccumulative potential

Pow = n-octanol/wasser partition coefficient

log Pow 1-3 = Not worth-mentioning accumulating in organisms.

CAS: 69-72-7 salicylic acid

log Pow 2.26 (.) (experimental)

12.4 Mobility in soil No further relevant information available.**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.**12.7 Other adverse effects** Avoid transfer into the environment.**Water hazard:**

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into soil.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Recommendation**

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

Hand over to disposers of hazardous waste.

European waste catalogue

16 05 06* laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

Uncleaned packagings:**Recommendation:** Disposal must be made according to official regulations.**SECTION 14: Transport information****14.1 UN number or ID number**

· ADR, IMDG, IATA Void

14.2 UN proper shipping name

· ADR, IMDG, IATA Void

14.3 Transport hazard class(es)

· ADR, IMDG, IATA Void

· Class Void

14.4 Packing group

· ADR, IMDG, IATA Void

· **14.5 Environmental hazards:** Not applicable.· **14.6 Special precautions for user** Not applicable.· **14.7 Maritime transport in bulk according to IMO instruments** Not applicable.· **Transport/Additional information:** Not dangerous according to the above specifications.GB
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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poisons Act UK

Regulated explosives precursors

None of the ingredients is listed.

Regulated poisons

None of the ingredients is listed.

Reportable explosives precursors

None of the ingredients is listed.

Reportable poisons

None of the ingredients is listed.

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors not regulated

Regulation (EU) No 649/2012 concerning the export and import of hazardous chemicals (PIC)

None of the ingredients is listed.

Regulation (EC) No 1334/2000 setting up a Community regime for the control of exports of dual-use items and technology:

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:

None of the ingredients is listed.

REGULATION (EU) 2019/1021 on persistent organic pollutants (POP)

None of the ingredients is listed.

LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

None of the ingredients is listed.

Substances of very high concern (SVHC) according to REACH, Article 57

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

Substances of very high concern (SVHC) according to UK REACH

This product does not contain any substances of very high concern above the legal concentration limit of $\geq 0.1\%$ (w / w).

Directive 2012/18/EU (SEVESO III):

Named dangerous substances - ANNEX I None of the ingredients is listed.

Information about limitation of use:

Employment restrictions concerning pregnant and lactating women must be observed (92/85/EEC).

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they 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.

Training hints Provide adequate information, instruction and training for operators.

Relevant phrases

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H361d Suspected of damaging the unborn child.

Abbreviations and acronyms:

OECD: Organisation for Economic Co-operation and Development

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure

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EC50: half maximal effective concentration
IC50: half maximal inhibitory concentration
NOEL or NOEC: No Observed Effect Level or Concentration
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
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
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Repr. 2: Reproductive toxicity – Category 2

Sources

Data arise from safety data sheets, reference works and literature.

ECHA: European Chemicals Agency <http://echa.europa.eu>

GESTIS- Stoffdatenbank (Substance Database, Germany)

IUCLID (International Uniform Chemical Information Database)

RTECS (Registry of Toxic Effects of Chemical Substances)

* Data compared to the previous version altered.

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