# Tintometer<sup>®</sup> Group Water Testing



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

Printing date 13.11.2023 Version number 46 (replaces version 45) Revision: 13.11.2023

#### 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, 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

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

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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Product name: Ammonia No.1

· Hazard pictograms

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

· 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 (HCI)

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:  $\geq 0.11 \text{ mm}$ 

· Penetration time of glove material

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

The exact break trough 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
Form:
Colour:
Odourless
Odour threshold:
Melting point/Freezing point:

Solid.

Tablets
Odourless
Not applicable.

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).

Not applicable.

Density and/or relative density

Density at 20°C:
Relative density:
Not determined.
Relative gas density
Not applicable (solid).
Particle characteristics
Not determined.

· 9.2 Other information

· Vapour pressure:

· 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<sub>(MIX)</sub>) - Calculation method:

Oral CLP ATE<sub>(MIX)</sub> 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 >5000 mg/kg (rat)

(GESTIS)

Inhalative LC<sub>0</sub> >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)

- · 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 405 (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)

- · 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%

#### · 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 90 mg/l/48h (gold orfe) (DIN 38412 Teil 15)

(Merck)

EC50 230 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:

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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 · 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.	
	O.P.	

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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 ≥ 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 ≥ 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 Sheets 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

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

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.

GB