## **Lovibond® Water Testing**

## Tintometer® Group



## Safety Data Sheet acc. to OSHA HCS (HazCom 2012)

Printing date 04/17/2024 Reviewed on 04/16/2024

## 1 Identification

- · Product identifier
- · Trade name: Ammonia No.1
- · Catalogue number: 00512581, 512580BT, 512581BT, 00512589BT, 00512580BT
- · Application of the substance / the mixture: Reagent for water analysis
- · Manufacturer/Supplier:

Tintometer Inc. 6456 Parkland Drive Sarasota, FL 34243 USA

phone: (941) 756-6410 fax: (941) 727-9654 www.lovibond.us Made in Germany

· Emergency telephone number: + 1 866 928 0789 (English, French, Spanish)

### 2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.



**GHS05 Corrosion** 

Eye Damage 1 H318 Causes serious eye damage.



GHS07

Acute Toxicity - Oral 4 H302 Harmful if swallowed.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Hazard Communication Standard (HCS).
- · Hazard pictograms







GHS08

GHS05

Signal word Danger

· Hazard-determining components of labeling:

salicylic acid

sodium nitroprusside dihydrate

Hazard statements

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H361 Suspected of damaging fertility or 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.

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P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

· Other hazards No further relevant information available.

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## 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of organic and inorganic compounds
- · Composition and Information on Ingredients:

Percent ranges are used due to the confidential product information.

	j	
EINECS: 200-712-3 Index number: 607-732-00-5	Toxic to Reproduction 2, H361; Eye Damage 1, H318; Acute Toxicity - Oral 4, H302	
CAS: 13755-38-9	sodium nitroprusside dihydrate	2.5–5%
EINECS: 238-373-9 RTECS: LJ 8925000	Acute Toxicity - Oral 3, H301	

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

### 4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air and to be sure call for a doctor.
- · After skin contact:

Immediately rinse with plenty of 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.

Most important symptoms and effects, both acute and delayed

irritations

after inhalation:

mucous membrane irritation

coughing

breathing difficulty

after swallowing:

resorption

sickness

vomiting

dizziness

after absorption of large amounts:

cardiovascular disorders

drop in blood pressure

cramps

· Danger:

Danger of circulatory collapse.

Danger of disturbed cardiac rhythm.

· Indication of any immediate medical attention and special treatment needed: No further relevant information available.

### 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · 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.

In case of fire, the following can be released:

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nitrous gases

Hydrogen chloride (HCI)

Hydrogen cyanide (HCN)

Potassium oxide

Sodium monoxide

- Advice for firefighters
- · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Ambient fire may liberate hazardous vapours.

#### **6 Accidental release measures**

- 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
- · Environmental precautions: Do not allow product to reach sewage system or any water course.
- Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Pick up mechanically.

Dispose contaminated material as waste according to section 13.

· Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

## 7 Handling and storage

- · 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.

Store protective clothing separately.

Wash hands before breaks and at the end of work.

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

- · Conditions for safe storage, including any incompatibilities
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility:

Do not store together with acids.

Store away from oxidizing agents.

Further information about storage conditions:

Store locked up or with access restricted to technical experts or their assistants.

Ensure that persons do not handle until all safety precautions have been read and understood.

Protect from heat and direct sunlight.

Protect from exposure to the light.

Store in dry conditions.

Protect from humidity and water.

- · Recommended storage temperature: 20°C +/- 5°C (approx. 68°F)
- Specific end use(s) No further relevant information available.

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## 8 Exposure controls/personal protection

#### · 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 creation were used as basis.

#### · Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.

#### · Personal protective equipment:

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

- Breathing equipment: Use respiratory protective device against the effects of fume/dust/aerosol.
- Recommended filter device for short term use: Filter P2
- · Protection of hands:

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:  $\geq 0.11$  mm

· Penetration time of glove material

Value for the permeation: Level  $\leq$  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.

- Eye protection: Tightly sealed goggles
- · Body protection: Protective work clothing

### · Limitation and supervision of exposure into the environment:

Do not allow product to reach sewage system or any water course.

#### 9 Physical and chemical properties

· Information on basic physical and chemical properties

Appearance:

Form / Physical state: Tablets
Color: Red
Odor: Odorless
Odor threshold: Not applicable.

· pH-value (11.9 g/l) at 20°C (68°F): 2.3

Melting point/freezing point: Not determined.
 Initial boiling point and boiling range: Not determined.
 Flash point: Not applicable.

· Flammability (solid, gas): The product is not combustible.

Auto igniting: Not applicable (solid).Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not self-igniting.

• **Danger of explosion:** Product does not present an explosion hazard.

· Flammability or explosive limits:

Lower: Not applicable.
Upper: Not applicable.

· Oxidizing properties: none

• Vapor Pressure: Not applicable.

Density at 20°C (68°F): 1.83 g/cm³ (15.27 lbs/gal)

Relative density: Not determined.
Vapor density: Not applicable.
Evaporation rate: Not applicable.

· Solubility(ies)

· Water: Soluble.

Partition coefficient (n-octanol/water): Not applicable (mixture).
 Viscosity: Not applicable.

• Kinematic: Not applicable (solid).

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Other information

· Solids content: 100.0 %

## 10 Stability and reactivity

- · Reactivity see section "Possibility of hazardous reactions"
- Chemical stability

Stable at ambient temperature (room temperature). sensitivity to light

Possibility of hazardous reactions

Contact with acids releases toxic gases.

Reacts with strong oxidizing agents.

- --> Forms heat.
- · Conditions to avoid Strong heating (decomposition)
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products:

Hydrogen cyanide (prussic acid HCN)

In case of fire: see section 5.

## 11 Toxicological information

- Information on toxicological effects
- · Acute toxicity:

Classification according to calculation procedure.

Harmful if swallowed.

· Acute toxicity estimate (ATE <sub>mix</sub> ) - Calcula	culation	method:
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Oral GHS ATE<sub>(MIX)</sub> 985 mg/kg (.)

· LD/LC50 values that are relevant for classification:

CAS: 69-7	2-7 salicy	ylic acid
Oral	LD50 89	1 mg/kg (rat)

Olai	LDSU	(GESTIS)
Dermal		>2000 mg/kg (rat) (GESTIS)
Inhalative	LC₀	>0.225 mg/l (rat) (4h (LC))
		>0.9 mg/l/1h (rat) (dust, aerosol)
		(Registrant, ECHA: no mortality at this dose)

## CAS: 13755-38-9 sodium nitroprusside dihydrate

Oral	LD50	99 mg/kg (rat)
		(RTECS, anhydrous substance)

- · Primary irritant effect:
- on the skin: Based on available data, the classification criteria are not met.
- on the eye:

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)

- · Sensitization: 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

Sensitization OECD 406 (negative) (IUCLID)

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#### · Carcinogenic categories

### · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

Other information: see section 8 / 15

· Synergistic Products: None

#### · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

The following statements refer to the mixture:

Toxic to Reproduction 2

- · 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 fertility or 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 -. Blockade 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

effect on the respiratory center, disturbance of basic metabolic processes and the central nervous system chronic: disturbances in the gastrointestinal tract

· Other information Other dangerous properties can not be excluded.

## 12 Ecological information

· 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)

#### 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

## · Persistence and degradability

#### CAS: 69-72-7 salicylic acid

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

#### · 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)

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- · Mobility in soil No further relevant information available.
- · Other adverse effects Avoid transfer into the environment.

## 13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Hand over to hazardous waste disposers.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

## 14 Transport information

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· DOT, IMDG, IATA

none

UN proper shipping name

DOT, IMDG, IATA

none

· Transport hazard class(es)

· DOT, IMDG, IATA

· Class

none

· Packing group

DOT, IMDG, IATA

none

· Environmental hazards:

Not applicable.

· Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL73/78

and the IBC Code

Not applicable.

· Transport/Additional information:

Not dangerous according to the above specifications.

### 15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (Extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· Hazardous Air Pollutants

None of the ingredients is listed.

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

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New Jersey Right-to-Know List:

None of the ingredients is listed.

**New Jersey Special Hazardous Substance List:** 

None of the ingredients is listed.

Pennsylvania Right-to-Know List:

None of the ingredients is listed.

· Pennsylvania Special Hazardous Substance List:

None of the ingredients is listed.

EPA (Environmental Protection Agency)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Information about limitation of use:

Observe national regulations where applicable:

Employment restrictions concerning pregnant and lactating women must be observed.

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

### 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.

· Relevant phrases

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H361 Suspected of damaging fertility or the unborn child.

· Recommended restriction of use: professional/industrial use only

· Version number / date of revision: 47 / 04/16/2024

Abbreviations and acronyms:

OECD: Organisation for Economic Co-operation and Development

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure EC50: half maximal effective concentration

IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

ACGIH® - American Conference of Governmental Industrial Hygienists

A1 - Confirmed human carcinogen

•A2 - Suspected human carcinogen

•A3 - Confirmed animal carcinogen with unknown relevance to humans

•A4 - Not classifiable as a human carcinogen

•A5 - Not suspected as a human carcinogen

IARC - International Agency for Research on Cancer •Group 1 - Carcinogenic to humans

•Group 2A - Probably carcinogenic to humans

•Group 2B - Possibly carcinogenic to humans

•Group 3 - Not classifiable as to carcinogenicity to humans

•Group 4 - Probably not carcinogenic to humans

NTP - National Toxicology Program, U.S. Department of Health and Human Services
•Group K - Known to be Human Carcinogens

•Group R - Reasonably Anticipated to be Human Carcinogens

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Acute Toxicity - Oral 3: Acute toxicity - Category 3

Acute Toxicity - Oral 4: Acute toxicity - Category

Eye Damage 1: Serious eye damage/eye irritation - Category 1

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Toxic to Reproduction 2: Reproductive toxicity – Category 2

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## · 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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