Lovibond® Water Testing

Tintometer® Group



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

Printing date 01/28/2020 Reviewed on 01/28/2020

1 Identification

- · Product identifier
- · Trade name: Ammonia No.1
- · Catalogue number: 00512581, 512580BT, 512581BT, 4512580BT, 4512581BT, 00512589BT
- · 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

Repr. 2 H361 Suspected of damaging fertility or the unborn child.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 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





GHS07



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

P201 Obtain special instructions before use.

P280 Wear protective gloves/protective clothing/eye 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.

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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.

CAS: 69-72-7	salicylic ac	id 2	20–30%
EINECS: 200-71	2-3 😵 Repr. 2	, H361; 🕎 Eye Dam. 1, H318; 🗘 Acute Tox. 4, H302	
Index number: 60	07-732-00-5		
CAS: 13755-38-9	sodium niti	oprusside dihydrate	2.5–5%
EINECS: 238-37	3-9 🔗 Acute T	ox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331	
RTECS: LJ 8925	000		

· 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 item 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
- · Storage:
- · 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 under lock and key and with access restricted to technical experts or their assistants only.

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.

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.

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· 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: ≥ 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.

- · 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 che Appearance:	nformation on basic physical and chemical properties Appearance:		
Form / Physical state: Color:	Tablets Pink		
· Odor: · Odor threshold:	Odorless Not applicable.		
· pH-value (11.9 g/l) at 20°C (68°F):	2.3		
Melting point/freezing point: Initial boiling point and boiling range:	Not determined. Not determined.		
· Flash point:	Not applicable.		
· Flammability (solid, gas):	The product is not combustible.		
· Decomposition temperature:	Not determined.		
· Auto-ignition temperature:	Product is not self-igniting.		
 Danger of explosion: Flammability or explosive limits: Lower: Upper: 	Product does not present an explosion hazard. Not applicable. Not applicable.		
· Oxidizing properties:	none		
 Vapor Pressure: Density at 20°C (68°F): Relative density: Vapor density: Evaporation rate: 	Not applicable. 1.83 g/cm³ (15.27 lbs/gal) Not determined. Not applicable. Not applicable.		
· Solubility(ies) Water:	Soluble.		
· Partition coefficient (n-octanol/water): Not applicable.			
· Viscosity:	Not applicable.		

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· Solvent content: 100.0 % Solids content:

· Other information No further relevant information available.

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

CAS: 69-72-7 salicylic acid

- · Information on toxicological effects
- · Acute toxicity: Classification according to calculation procedure.

ſ	· Acute toxicity estimate (ATE _(MIX)) - Calculation method:		
ſ	Oral	GHS ATE _(MIX)	985 mg/kg (.)
	Inhalative	GHS ATE _(MIX)	11 mg/l/4h (aerosol)

· LD/LC50 values that are relevant for classification:

Oral	LD50	891 mg/kg (rat)
		(GESTIS)
Dermal	LD50	>5000 mg/kg (rat)
		(GESTIS)
Inhalative	LC₀	>0.225 mg/l (rat) (4h (LC))
	LC50	>0.9 mg/l/1h (rat) (dust, aerosol)

(Registrant, ECHA: no mortality at this dose)

CAS: 13755-38-9 sodium nitroprusside dihydrate

LD50 99 mg/kg (rat) Oral (RTECS, anhydrous substance) Dermal LD50 300 mg/kg (ATE) Inhalative LC50 0.5 mg/l/4h (ATE)

- · 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

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		(rabbit: slight irritation) (IUCLID)
Irritation of eyes	OECD 405	(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.

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CAS: 69-72-7 salicylic acid

Sensitization OECD 406 (negative) (IUCLID)

· 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:

Repr. 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 complies to cyanogen compounds / nitriles in general:

Utmost caution! Release of hydrocyanic acid is possible - blockade of cellular respiration.

Other dangerous properties can not be excluded.

12 Ecological information

· 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)

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)

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

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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

· UN-Number · 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		

Not applicable.

Not dangerous according to the above specifications.

15 Regulatory information

· Transport/Additional information:

and the IBC Code

- · 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.

· New Jersey Right-to-Know List:

None of the ingredients is listed.

· New Jersey Special Hazardous Substance List:

None of the ingredients is listed.

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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: 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.

H311 Toxic in contact with skin.

H318 Causes serious eye damage.

H331 Toxic if inhaled.

H361 Suspected of damaging fertility or the unborn child.

Date of preparation / last revision 01/28/2020 / 40

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: hallf 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 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)

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RTECS (Registry of Toxic Effects of Chemical Substances)

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 \cdot * Data compared to the previous version altered.

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