

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

Printing date 14.11.2023

Version number 3 (replaces version 2)

Revision: 30.09.2022

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

· **1.1 Product identifier**

· **Product name:** Nessler's reagent

· **Catalog number:** 56Z080498, 465200, 465201, 465203

· **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**



GHS06 skull and crossbones

Acute Tox. 3      H301 Toxic if swallowed.  
Acute Tox. 2      H310 Fatal in contact with skin.  
Acute Tox. 3      H331 Toxic if inhaled.



GHS08 health hazard

STOT RE 2      H373 May cause damage to the central nervous system and the kidneys through prolonged or repeated exposure.



GHS05 corrosion

Met. Corr.1      H290 May be corrosive to metals.  
Skin Corr. 1A      H314 Causes severe skin burns and eye damage.  
Eye Dam. 1      H318 Causes serious eye damage.

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GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

**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**

GHS05



GHS06



GHS08



GHS09

**Signal word** Danger**Hazard-determining components of labelling:**potassium hydroxide  
dipotassium tetraiodomercurate**Hazard statements**

H290 May be corrosive to metals.  
 H301+H331 Toxic if swallowed or if inhaled.  
 H310 Fatal in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H373 May cause damage to the central nervous system and the kidneys through prolonged or repeated exposure.  
 H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection.  
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 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+P310 IF exposed or concerned: Immediately call a POISON CENTER/doctor.  
 P405 Store locked up.

**2.3 Other hazards**

Acid burns have to be treated immediately, as it may otherwise cause badly curing wounds.  
 CAS 7783-33-7: Danger by skin resorption.

**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**

The product does not contain substances with endocrine disrupting properties.

### SECTION 3: Composition/information on ingredients

**3.2 Mixtures****Description:** aqueous solution**Dangerous components:**

The percent content of the mercury compound mentioned below refers to the amount of the pure mercury therein.

CAS: 1310-58-3 EINECS: 215-181-3 Index No: 019-002-00-8 Reg.nr.: 01-2119487136-33-XXXX	potassium hydroxide ⚠ Met. Corr. 1, H290; Skin Corr. 1A, H314; ⚠ Acute Tox. 4, H302 Specific concentration limits: Skin Corr. 1A; H314: C ≥ 5 % Skin Corr. 1B; H314: 2 % ≤ C < 5 % Skin Irrit. 2; H315: 0.5 % ≤ C < 2 % Eye Irrit. 2; H319: 0.5 % ≤ C < 2 %	10-15%
CAS: 7783-33-7 EINECS: 231-990-4 Index No: 080-002-00-6	dipotassium tetraiodomercurate ⚠ Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; ⚠ STOT RE 2, H373; ⚠ Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1) Specific concentration limit: STOT RE 2; H373: C ≥ 0.1 %	5-10%

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· **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**

Personal protection for the First Aider!

Instantly remove any clothing soiled by the product.

Remove breathing apparatus only after soiled clothing has been completely removed.

· **After inhalation** Supply fresh air or oxygen; call for doctor.

##### · **After skin contact**

Instantly wash with polyethylene glycol 400.

Instantly rinse with water.

Immediate medical treatment necessary. Failure to treat burns can prevent wounds from healing.

##### · **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.

Do not induce vomiting; instantly call for medical help.

#### · **4.2 Most important symptoms and effects, both acute and delayed:**

burns

after inhalation:

Possible damages: damage of respiratory tract

after swallowing:

coughing

breathing difficulty

Danger of pulmonary oedema.

strong caustic effect.

pain

vomiting

Danger of system failure.

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

If swallowed or in case of vomiting, danger of entering the lungs

Subsequent observation for pneumonia and pulmonary oedema

### 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.

mercury vapours

#### · **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

Use breathing protection against the effects of fumes/dust/aerosol.

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- **Advice for emergency responders:** Protective equipment: see section 8
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or water bodies.  
Inform respective authorities in case product reaches water or sewage system.
- **6.3 Methods and material for containment and cleaning up:**  
Ensure adequate ventilation.  
Absorb with liquid-binding material (sand, diatomite, universal binders).  
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:**  
Open and handle container with care.  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Hygiene measures:**  
Do not inhale gases / fumes / aerosols.  
Do not get in eyes, on skin, or on clothing.  
Take off immediately all contaminated clothing.  
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.  
Store only in the original container.  
Unsuitable material for container:  
aluminum (Al), tin (Sn), zinc (Zn)
- **Information about storage in one common storage facility:** Store away from metals.
- **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.  
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:**

<b>CAS: 1310-58-3 potassium hydroxide</b>	
WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup>

WEL (Great Britain)	Short-term value: 2 mg/m <sup>3</sup>
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- **Regulatory information** WEL (Great Britain): EH40/2020

- **DNELs**

Derived No Effect Level (DNEL)

<b>CAS: 1310-58-3 potassium hydroxide</b>		
Inhalative	DNEL	1 mg/m <sup>3</sup> (Worker / acute / local effects) (Merck)
		1 mg/m <sup>3</sup> (Consumer / long-term / local effects) (Merck)

- **Recommended monitoring procedures:**

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

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- **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**  
Alkaline resistant 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 = 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):** Alkaline resistant protective clothing
- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
- **Recommended filter device for short term use:** Special gas filter Hg-P3
- **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** Fluid
- **Form:** Solution
- **Colour:** Light yellow
- **Odour:** Odourless
- **Odour threshold:** Not applicable.
- **Melting point/Freezing point:** Not determined.
- **Boiling point or initial boiling point and boiling range** 105°C
- **Flammability** The product is not combustible.
- **Explosive properties:** Product is not explosive.
- **Lower and upper explosion limit**
- **Lower:** Not applicable.
- **Upper:** Not applicable.
- **Flash point:** Not applicable.
- **Auto-ignition temperature:** Not applicable.
- **Decomposition temperature:** Not determined.
- **pH** Strongly alkaline
- **Kinematic viscosity** Not determined.
- **Solubility**
- **Water:** Fully miscible
- **Partition coefficient n-octanol/water (log value)** Not applicable (mixture).
- **Vapour pressure:** Not determined.
- **Density and/or relative density**
- **Density at 20°C:** 1.16 g/cm<sup>3</sup>
- **Relative density:** Not determined.
- **Relative gas density** Not determined.
- **Particle characteristics** Not applicable (liquid).

#### · 9.2 Other information

- **Information with regard to physical hazard classes**
- **Corrosive to metals** May be corrosive to metals.
- **Other safety characteristics**
- **Oxidising properties:** none

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· <b>Additional information</b>	
· <b>Solids content:</b>	15 - 25 %
· <b>Solvent content:</b>	
· <b>Water:</b>	75 - 85 %

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** see section 10.3
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**  
 Reacts with metals forming hydrogen (Danger of explosion in case of large amounts!)  
 Corrosive action on metals  
 Reacts with strong acids  
 Reacts with halogenated compounds  
 Reacts with alkaline earth metals  
 Reacts with ammonia (NH<sub>3</sub>).
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**  
 metals  
 light metals  
 organic substances  
 various plastics  
 glass
- **10.6 Hazardous decomposition products:** 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:  
 Toxic if swallowed or if inhaled.  
 Fatal in contact with skin.

**LD/LC50 values that are relevant for classification:**
**CAS: 1310-58-3 potassium hydroxide**

Oral	LD50	333 mg/kg (rat) (OECD 425) (ECHA)
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**CAS: 7783-33-7 dipotassium tetraiodomercurate**

Oral	LD50	5 mg/kg (ATE)
Dermal	LD50	5 mg/kg (ATE)
Inhalative	LC50/4h	0.05 mg/l (ATE)

- **Skin corrosion/irritation** Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**  
 Causes serious eye damage.  
 Risk of blindness!

**Information on components:**
**CAS: 1310-58-3 potassium hydroxide**

Irritation of skin	OECD 404	(rabbit: burns)
Irritation of eyes	OECD 405	(rabbit: burns)

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

**Information on components:**
**CAS: 1310-58-3 potassium hydroxide**

Sensitisation	OECD 406	(guinea pig: negative)
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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** Based on available data, the classification criteria are not met.

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· <b>Information on components:</b>	
<b>CAS: 1310-58-3 potassium hydroxide</b>	
OECD 471	(negative) (Bacterial Reverse Mutation Test - Ames test) (Escherichia coli / Salmonella typhimurium)

- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.
- **STOT (specific target organ toxicity) -repeated exposure**  
May cause damage to the central nervous system and the kidneys through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**  
Mercury compounds have a cytotoxic and protoplasmatoxic effect.  
The principal signs manifest themselves in the CNS.  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.  
Other dangerous properties can not be excluded.

<b>CAS: 1310-58-3 potassium hydroxide</b>	
· (source: GESTIS) Main toxic effects: Acute: severe irritation and caustic effects on all contacted mucous membranes and skin; risk of irreversible eye damage Chronic: irritant effect on eyes, respiratory tract and skin	
Further information: Regardless of the route of exposure, the focus is on the local effect. The type and duration of exposure, concentration, pH value, dose and the time at which treatment measures are applied are essential for the extent of the damage. The greatest hazard is when the solid or solution comes into direct contact with the eye. Even highly diluted solutions can still cause severe damage. Rapidly progressive damage also occurs on the skin, even when diluted solutions act on it. Airborne exposure to KOH causes irritation of the respiratory tract (especially the nose and throat), eyes and skin. At high concentrations, damage to the lower airways and lungs cannot be ruled out.	

- **11.2 Information on other hazards**
- **Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.

## SECTION 12: Ecological information

### · 12.1 Toxicity

· <b>Aquatic toxicity:</b>	
<b>CAS: 1310-58-3 potassium hydroxide</b>	
LC50	80 mg/l/96h (mosquitofish) (IUCLID)

- **12.2 Persistence and degradability** .
- **Other information:**  
Mixture of inorganic compounds.  
Methods for the determination of biodegradability are not applicable to inorganic substances.
- **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**  
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** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**  
Forms corrosive mixtures with water even if diluted.  
Harmful effect due to pH shift.  
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.

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### 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 07*	discarded inorganic chemicals consisting of or containing hazardous substances
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- **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

### SECTION 14: Transport information

- **14.1 UN number or ID number**

- **ADR, IMDG, IATA**

UN2922

- **14.2 UN proper shipping name**

- **ADR**

2922 CORROSIVE LIQUID, TOXIC, N.O.S. (POTASSIUM HYDROXIDE, MERCURY POTASSIUM IODIDE), ENVIRONMENTALLY HAZARDOUS CORROSIVE LIQUID, TOXIC, N.O.S. (POTASSIUM HYDROXIDE, MERCURY POTASSIUM IODIDE), MARINE POLLUTANT

- **IMDG**

- **IATA**

CORROSIVE LIQUID, TOXIC, N.O.S. (POTASSIUM HYDROXIDE, MERCURY POTASSIUM IODIDE)

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class**

8 (CT1) Corrosive substances.

- **Label**

8+6.1

- **IMDG**



- **Class**

8 Corrosive substances.

- **Label**

8/6.1

- **IATA**



- **Class**

8 Corrosive substances.

- **Label**

8 (6.1)

- **14.4 Packing group**

- **ADR, IMDG, IATA**

II

- **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: dipotassium tetraiodomercurate

- **Marine pollutant:**

Symbol (fish and tree)

- **Special marking (ADR):**

Symbol (fish and tree)

- **14.6 Special precautions for user**

Warning: Corrosive substances.

- **Kemler Number:**

86

- **EMS Number:**

F-A,S-B

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· <b>Segregation groups</b>	(SGG18) Alkalis, (SGG7) heavy metals and their salts (including their organometallic compounds), (SGG11) mercury and mercury compounds
· <b>Stowage Category</b>	B
· <b>Stowage Code</b>	SW2 Clear of living quarters.
· <b>14.7 Maritime transport in bulk according to IMO instruments</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>Transport category</b>	2
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

### 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**

The concentration of the substance is less than the stated mass percentage and is therefore of no concern:

CAS: 1310-58-3	potassium hydroxide	17% of total caustic alkalinity
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· **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)**

CAS: 7783-33-7	dipotassium tetraiodomercurate	Annex I Part 1 Annex I Part 3 Annex V Part 2
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· **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).

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- **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.
  - **Seveso category**  
H2 ACUTE TOXIC  
E2 Hazardous to the Aquatic Environment
  - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
  - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
  - **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 18
  - **Information about limitation of use:**  
Employment restrictions concerning young persons must be observed (94/33/EC).  
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.
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### \* 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**  
H290 May be corrosive to metals.  
H300 Fatal if swallowed.  
H302 Harmful if swallowed.  
H310 Fatal in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H330 Fatal if inhaled.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.
- **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  
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)  
DNEL: Derived No-Effect Level (UK REACH)  
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  
Met. Corr. 1: Corrosive to metals – Category 1  
Acute Tox. 2: Acute toxicity – Category 2  
Acute Tox. 3: Acute toxicity – Category 3  
Acute Tox. 4: Acute toxicity – Category 4  
Acute Tox. 1: Acute toxicity – Category 1  
Skin Corr. 1A: Skin corrosion/irritation – Category 1A  
Eye Dam. 1: Serious eye damage/eye irritation – Category 1  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
- **Sources**  
Data arise from safety data sheets, reference works and literature.

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# Safety data sheet

## according to 1907/2006/EC, Article 31

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**Product name: Nessler's reagent**

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ECHA: European Chemicals Agency <http://echa.europa.eu>  
IUCLID (International Uniform Chemical Information Database)  
GESTIS- Stoffdatenbank (Substance Database, Germany)

(Contd. of page 10)

· \* Data compared to the previous version altered.

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