

Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 15.04.2024

Version number 13 (replaces version 12)

Revision: 15.04.2024

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

- **1.1 Product identifier**
- **Trade name:** *Nessler's reagent single solution*
- **SDS number:** *CH0650*
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
For professional users only
No further relevant information available.
- **Life cycle stages**
IS Use at industrial Sites
F Formulation or re-packing
- **Sector of Use**
SU9 Manufacture of fine chemicals
SU24 Scientific research and development
- **Product category**
PC20 Processing aids such as pH-regulators, flocculants, precipitants, neutralization agents
PC21 Laboratory chemicals
PC29 Pharmaceuticals
PC40 Extraction agents
- **Process category**
PROC1 Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions.
PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions
PROC3 Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition
PROC4 Chemical production where opportunity for exposure arises
PROC5 Mixing or blending in batch processes
PROC9 Transfer of substance or mixture into small containers (dedicated filling line, including weighing)
PROC15 Use as laboratory reagent
- **Environmental release category**
ERC1 Manufacture of the substance
ERC2 Formulation into mixture
ERC4 Use of non-reactive processing aid at industrial site (no inclusion into or onto article)
ERC6a Use of an intermediary
- **Application of the substance / the mixture** *Chemicals products for laboratory*
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
CARLO ERBA REAGENTS
Chaussée du Vexin
Parc d'Affaires des Portes - BP616
27106 VAL DE REUIL Cedex
Téléphone: +33 (0)2 32 09 20 00
Télécopie: +33 (0)2 32 09 20 20
- **Further information obtainable from:**
Q.A / Normative
email: MSDS_CER-SDS@cer.dgroup.it
- **1.4 Emergency telephone number:**
Ireland - Tel : 00 353 1 8092568 - 00 353 1 8379964 (24h/24)
EU Tel : 112

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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.



GHS08 health hazard

Muta. 2 H341 Suspected of causing genetic defects.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Aquatic Chronic 3 H412 Harmful 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 CLP regulation.
- **Hazard pictograms**



GHS05



GHS06



GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**

Potassium hydroxide

Mercury dichloride

Potassium iodide

- **Hazard statements**
- H301 Toxic if swallowed.
- H314 Causes severe skin burns and eye damage.
- H341 Suspected of causing genetic defects.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H412 Harmful to aquatic life with long lasting effects.

- **Precautionary statements**

P280 Wear protective gloves / eye protection / face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

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].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:**
Mixture made by the following substances:

CAS: 7732-18-5 EINECS: 231-791-2 RTECS: ZC 0110000	water, distilled, conductivity or of similar purity	≤100%
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- **Dangerous components:**

CAS: 1310-58-3 EINECS: 215-181-3 Index number: 019-002-00-8 RTECS: TT 2102000 Reg.nr.: 01-2119487136-33	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 %	10-25%
CAS: 7681-11-0 EINECS: 231-659-4 RTECS: TT 2975000 Reg.nr.: 01-2119966161-40	Potassium iodide ☠ STOT RE 1, H372 Specific concentration limits: STOT RE 1; H372: C ≥ 10 % STOT RE 2; H373: 1 % ≤ C < 10 %	≥1-<5%
CAS: 7487-94-7 EINECS: 231-299-8 Index number: 080-010-00-X RTECS: OV 9100000	Mercury dichloride ☠ Acute Tox. 2, H300; Acute Tox. 1, H310; ☠ Muta. 2, H341; Repr. 2, H361f; STOT RE 1, H372; ☠ Skin Corr. 1B, H314; ☠ Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=1)	≥1-<2.5%

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Remove immediately any clothing soiled by the product and wash with plenty of water. The rescuer has to be equipped with individual protection
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly. Wash contaminated clothing before reuse.
Seek immediate medical advice.
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Drink plenty of water and provide fresh air.
Do not induce vomiting; call for medical help immediately.
Call for a doctor immediately.
Rinse out mouth and then drink plenty of water.

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- **Information for doctor:** Show the doctor this Material Safety Data Sheet.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet.
- **5.2 Special hazards arising from the substance or mixture** Potassium oxides.
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale gases in case of fire or combustion.
- **Additional information** Keep receptacles cool with water spray.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
Ensure adequate ventilation
- **6.2 Environmental precautions:**
Do not allow to penetrate the ground/soil.
Dilute with plenty of water after collecting the liquid.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Collect the liquid with vacuum in a suitable container and absorb the remainder with a porous material (diatomite, acid binders, universal binders, etc).
Ensure adequate ventilation.
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Store in cool, dry place in tightly closed receptacles.
Ensure good ventilation/exhaustion at the workplace.
Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
When diluting always pour product into water and not vice versa.
- **Information about fire - and explosion protection:**
The product is not flammable.
Keep respiratory protective device available.

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- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
 Store in a well-ventilated place. Keep container tightly closed.
 Provide alkali-resistant floor.
 Provide floor trough without outlet.
 Use only receptacles specifically permitted for this substance/product.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

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

CAS: 7487-94-7 Mercury dichloride

BOELV	Long-term value: 0.02 mg/m ³ as Hg
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IOELV	Long-term value: 0.02 mg/m ³ as Hg
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- **DNELs**

CAS: 1310-58-3 Potassium hydroxide

Inhalative	DNEL (workers-local chronic effects)	1 mg/m ³
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- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Appropriate engineering controls**

Safety shower and eye bath. Mechanical exhaust required.

No further data; see section 7.

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

- **General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

- **Respiratory protection:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

The selected respiratory protection must comply with standard EN 136/140/143/145/149.

- **Hand protection**

The selected protective gloves have to satisfy the specifications of REGULATION (EU) 2016/425 and the standard EN 374 derived from it.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

Rubber gloves

Avoid direct contact with the chemical/ the product/ the preparation by organisational measures.

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Rubber gloves

· **Penetration time of glove material**

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

· **Eye/face protection**



Tightly sealed goggles

· **Body protection:**

Protective work clothing

Alkaline resistant protective clothing

Apron

· **Environmental exposure controls**

The product must not be released into the environment.

In case of unintended release of the product: See section 6 of the Safety Data Sheet.

· **Risk management measures** Keep good industrial hygiene.

SECTION 9: Physical and chemical properties

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

· **Molecular weight**

· **Physical state**

Fluid

· **Colour:**

Colourless

· **Odour:**

Odourless

· **Odour threshold:**

Not determined.

· **Melting point/freezing point:**

Undetermined.

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

>100 °C

· **Flammability**

Not applicable.

· **Lower and upper explosion limit**

· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Flash point:**

Not applicable.

· **Decomposition temperature:**

Not determined.

· **pH at 20 °C**

>13

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **Dynamic:**

Not determined.

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· Solubility	
· water:	Fully miscible.
· organic solvents:	Insoluble
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Vapour pressure (2):	
· Density and/or relative density	
· Density at 20 °C:	1.25 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.

· 9.2 Other information	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product does not present an explosion hazard.
· Solvent separation test:	
· Water:	83.0 %
· Solids content:	17.0 %
· Change in condition	
· Evaporation rate	Not determined.

· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Void
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** See 10.3
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Strong exothermic reaction with acids.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.

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 · **10.6 Hazardous decomposition products:** Potassium oxides.

SECTION 11: Toxicological information

 · **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

 · **Acute toxicity** Toxic if swallowed.

 · **LD/LC50 values relevant for classification:**
CAS: 1310-58-3 Potassium hydroxide

Oral	LD50	333 mg/kg (rat)
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 · **Skin corrosion/irritation** Causes severe skin burns and eye damage.

 · **Serious eye damage/irritation**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

Causes serious eye damage.

 · **Ingestion:**

It can be harmful if swallowed.

Toxic if swallowed.

 · **Inhalation:**

Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

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

 · **Germ cell mutagenicity** Suspected of causing genetic defects.

 · **Carcinogenicity** Based on available data, the classification criteria are not met.

 · **Reproductive toxicity** Based on available data, the classification criteria are not met.

 · **STOT-single exposure** Based on available data, the classification criteria are not met.

 · **STOT-repeated exposure** May cause damage to organs through prolonged or repeated exposure.

 · **Aspiration hazard** Based on available data, the classification criteria are not met.

 · **Other information (about experimental toxicology):** No further relevant information available.

 · **Subacute to chronic toxicity:** Cumulative effects in case of repeated exposures.

 · **11.2 Information on other hazards**

 · **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

 · **12.1 Toxicity**

 · **Aquatic toxicity:**
CAS: 1310-58-3 Potassium hydroxide

EC50/48h	40 mg/l (Daphnia)
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LC50/96h	80 mg/l (fishes)
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 · **12.2 Persistence and degradability** No further relevant information available.

 · **Method**

 · **Ecological information** Not available

 · **12.3 Bioaccumulative potential** May be accumulated in organism

 · **12.4 Mobility in soil** No further relevant information available.

 · **12.5 Results of PBT and vPvB assessment**

 · **PBT:** Not applicable.

 · **vPvB:** Not applicable.

 · **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

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· **12.7 Other adverse effects**

· **Remark:**

Algae growth inhibition.

Local effects: may change the environmental pH endangering the aquatic life.

Harmful to fish

· **Additional ecological information:**

· **General notes:**

Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water

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

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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

Harmful to aquatic organisms

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

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

Reutilise if possible or contact a waste processors for recycling or safe disposal.

· **Waste disposal key:**

The European Union does not establish uniform rules for the disposal of chemical waste, which are special waste. Their treatment and elimination of the domestic legislation of each country. So, in each case, you should contact the relevant authorities, or those companies legally authorized for elimination of waste.

2014/955/UE: Council Decision of 18 December 2014 amending the list of wastes contained in Decision 2000/532/EC.

Directive 2008/98/EC of the european parliament and of the council of 18 November 2008, in ist latest valid version.

· **European waste catalogue**

HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP6	Acute Toxicity
HP8	Corrosive
HP11	Mutagenic
HP14	Ecotoxic

· **Uncleaned packaging:**

The containers and packaging materials contaminated with dangerous substances or preparations, have the same treatment of products.

Directive 94/62/EC of the European Parliament and the Council of 20 December 1994 on packaging and packaging waste.

· **Recommendation:**

Disposal must be made according to official regulations.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR/RID, IMDG, IATA**

UN2922

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· **14.2 UN proper shipping name**
· **ADR/RID** 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (POTASSIUM HYDROXIDE, MERCURY IODIDE)
· **IMDG** CORROSIVE LIQUID, TOXIC, N.O.S. (POTASSIUM HYDROXIDE, MERCURY IODIDE)
· **IATA** Corrosive liquid, toxic, n.o.s. (POTASSIUM HYDROXIDE, MERCURY IODIDE)

· **14.3 Transport hazard class(es)**

· **ADR/RID**



· **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/RID, IMDG, IATA** II

· **14.5 Environmental hazards:**

Product contains environmentally hazardous substances: mercury diiodide

· **Marine pollutant:**

Yes

· **14.6 Special precautions for user**

Warning: Corrosive substances.

· **Hazard identification number (Kemler code):**

86

· **EMS Number:**

F-A,S-B

· **Segregation groups**

(SGG18) Alkalis, (SGG7) heavy metals and their salts (including their organometallic compounds)

· **Stowage Category**

B

· **Stowage Code**

SW2 Clear of living quarters.

· **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

· **Transport/Additional information:**

· **ADR/RID**

· **Excepted quantities (EQ):**

E2

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· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	E
<hr style="border-top: 1px dashed black;"/>	
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 2922 CORROSIVE LIQUID, TOXIC, N.O.S. (POTASSIUM HYDROXIDE, MERCURY IODIDE), 8 (6.1), II

SECTION 15: Regulatory information

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

· SARA Section 355 (extremely hazardous substances)

CAS: 7487-94-7	Mercury dichloride
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· SARA Section 313 (specific toxic chemical listings)

CAS: 7487-94-7	Mercury dichloride
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· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Directive 2012/18/EU

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

· **Seveso category H2 ACUTE TOXIC**

· **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 (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.

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 18

· Regulation (EU) No 649/2012

CAS: 7487-94-7	Mercury dichloride	Annex I Part 1 Annex I Part 3 Annex V Part 2
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· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· National regulations:

· Technical instructions (air):

Class	Share in %
Wasser	50-100
I	<2.5

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- **Waterhazard class:** Water danger class 3 (Self-assessment): extremely hazardous for water.
- **Other regulations, limitations and prohibitive regulations**
 0.0 g/l
 0.00 %
- **Substances of very high concern (SVHC) according to REACH, Article 57**
 None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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**

- 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.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H341 Suspected of causing genetic defects.
- H361f Suspected of damaging fertility.
- H372 Causes damage to organs through prolonged or repeated exposure.
- 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.

· **Department issuing SDS:** Q.A./Normative

· **Date of previous version:** 24.03.2021

· **Version number of previous version:** 12

· **Abbreviations and acronyms:**

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- ICAO: International Civil Aviation Organisation
- RCR : Risk Characterisation Ratio
- ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
- 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 (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
- ATE: Acute toxicity estimate values
- 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
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Eye Dam. 1: Serious eye damage/eye irritation – Category 1
- Muta. 2: Germ cell mutagenicity – Category 2

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Safety data sheet
according to Regulation (EC) No 1907/2006, Article 31

Printing date 15.04.2024

Version number 13 (replaces version 12)

Revision: 15.04.2024

Trade name: Nessler's reagent single solution

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Repr. 2: Reproductive toxicity – Category 2

STOT RE 1: Specific target organ toxicity (repeated exposure) – 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 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· Sources

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006, REACH, in the latest valid version.

Regulation (EC) N° 1272/2008 of the European Parliament and of the Council of 16 December 2008, CLP, in the latest valid version.

Globally Harmonized System, GHS

ADR/RID, IMDG, IATA

PubChem : an open chemistry database at the National Institutes of Health (NIH)

ECHA : European CHEMicals Agency

GESTIS : Information system on hazardous substances of the German Social Accident Insurance

· * Data compared to the previous version altered. .

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