

SAFETY DATA SHEET

Version 8.4 Revision Date 30.06.2021 Print Date 12.07.2024

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifiers			
	Product name	:	Lugol's solution (diluted iodine-potassium iodide solution) for the Gram staining method
	Product Number Catalogue No. Brand	:	1.09261 109261 Millipore
1.2	Other means of identification		
	No data available		
1.3	Relevant identified uses of the substance or mixture and uses advised against		
	Identified uses	:	In vitro diagnostic reagent, Reagent for analysis
1.4	Details of the supplier of the safety data sheet		
	Company	:	Merck Life Science Pty Ltd Ground Floor, Building 1, 885 Mountain Highway BAYSWATER VIC 3153 AUSTRALIA
	Telephone E-mail address	:	+61 1800 800 097 customersupport.anz@merckgroup.com
1.5	Emergency telephone		
	Emergency Phone #	:	Free call (24/7): 1800 862 115 Int'l (24/7): +61 2 9037 2994 (CHEMTREC)

SECTION 2: Hazards identification 2.1 GHS Classification

Not a hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

2.3 Other hazards - none

SECTION 3: Composition/information on ingredients Substance / Mixture : Mixture

3.2 Mixtures

Hazardous ingredients

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Page 1 of 7

Component		Classification	Concentration
Iodine			
CAS-No. EC-No. Index-No.	7553-56-2 231-442-4 053-001-00-3	Acute Tox. 4; 2; 2A; STOT SE 3; STOT RE 1; Aquatic Acute 1; H302, H332, H312, H315, H319, H335, H372, H400 M-Factor - Aquatic Acute: 1	>= 0.25 - < 1 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture Not combustible.

Ambient fire may liberate hazardous vapours.

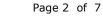
5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

5.4 Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
- **6.2 Environmental precautions** Do not let product enter drains.
- 6.3 Methods and materials for containment and cleaning up Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H⁺, Merck Art. No. 101595). Dispose of properly. Clean up affected area.
- **6.4 Reference to other sections** For disposal see section 13.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** For precautions see section 2.2.
- 7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Protected from light.Tightly closed.

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.3 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Change contaminated clothing. Wash hands after working with substance.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact

Material: Nitrile rubber Minimum layer thickness: 0.11 mm

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Page 3 of 7

Break through time: > 480 min Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: > 480 min Material tested:KCL 741 Dermatril® L

Respiratory protection

Not required; except in case of aerosol formation.

Control of environmental exposure Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: liquid Color: brown
b)	Odor	slight
c)	Odor Threshold	No data available
d)	рH	3.5 at 20 °C
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	100 °C at 1,013 hPa
g)	Flash point	Not applicable
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	No data available
I)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	at 20 °C soluble
0)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition	Not applicable

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Page 4 of 7

temperature

- q) Decomposition No data available temperature
- r) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available
- s) Explosive properties No data available
- t) Oxidizing properties No data available
- 9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

- **10.2 Chemical stability** The product is chemically stable under standard ambient conditions (room temperature) .
- **10.3 Possibility of hazardous reactions** Violent reactions possible with: The generally known reaction partners of water.

10.4 Conditions to avoid

no information available

- **10.5 Incompatible materials** No data available
- **10.6 Hazardous decomposition products** In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture

Acute toxicity Oral: No data available Inhalation: No data available Dermal: No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity No data available

Carcinogenicity No data available

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Page 5 of 7

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available

11.2 Additional Information

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

SECTION 12: Ecological information

12.1 Toxicity

Mixture

No data available

- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

SECTION 14: Transport information 14.1 UN number		
ADR/RID: -	IMDG: -	IATA-DGR: -
14.2 UN proper shipping name		
ADR/RID:	Not dangerous goods	
IMDG:	Not dangerous goods	

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	IATA-DGR:	Not dangerous goods	
14.3	Transport hazard cla ADR/RID: -	ss(es) IMDG: -	IATA-DGR: -
14.4	Packaging group ADR/RID: -	IMDG: -	IATA-DGR: -
14.5	Environmental hazar ADR/RID: no	ds IMDG Marine pollutant: no	IATA-DGR: no
14.6 Special precautions for user			
14.7	Incompatible materi	als	

Further information

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Notification status AICS:	On the inventory, or in compliance with the inventory
DSL:	All components of this product are on the Canadian DSL
ENCS:	Not in compliance with the inventory - Iodine
ISHL:	Not in compliance with the inventory - water, Iodine
KECI:	On the inventory, or in compliance with the inventory
NZIoC:	Not in compliance with the inventory
PICCS:	On the inventory, or in compliance with the inventory

SECTION 16: Other information

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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