

AnalytiChem Belgium NV Industriezone "De Arend" 2 B-8210 ZEDELGEM - BELGIUM

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SAFETY DATA SHEET

1. Identification of the substance / preparation and company.

1.1 Product identifier

Product Nr. CL04.1201 Trade name Lugol solution

REACH A registration number is not available for this substance as the substance or its use are Registration exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later Number

registration deadline.

1.2 Relevant identified uses of the substance or mixture and uses adviced against

Identified uses: Reagent for analysis

In compliance with the conditions described in the annex to this safety data sheet.

1.3 Information provided by AnalytiChem Belgium NV product service.

Responsible department: AnalytiChem Belgium NV Industriezone "De Arend" 2 B-8210 Zedelgem

BELGIUM

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1.4 Emergency telephone: 00 (32) 50.28.83.20

2. Hazard identification

2.1 Classification of the substance or the mixture (EG 1272/2008)

Acute toxicity, Dermal, Categorie 4, H312 Acute toxicity, Inhalation, Categorie 4, H332 Hazardous to the aquatic environment, Categorie 1, H400

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

For the full text of R-sentences mentioned in this Section, see Section 16

2.2 GHS-Labelling

GHS-Labelling Labelling (REGULATION (EC) No 1272/2008) (EG 1272/2008) Hazard pictograms:





Signal word: Warning:

Hazard statements:

Harmful in contact with skin. H312

H332 Harmful if inhaled.

H400 Very toxic to aquatic life. Precautionary statements:

P273

Avoid release to the environment.

Reduced labelling Hazard pictograms:





Signal word: Warning:

3. Composition / Information on ingredients.

3.1 Substance

Not applicable

3.2 Mixture

Hazardous Ingredients:

Name according to EC directives:

| Component | Cas-No. | Concentration | Classification (REGULATION (EC) No 1272/2008) |
|-----------------------|-----------|---------------|--|
| lodine, pellets p.a. | 7553-56-2 | ≥1%-<10% | Acute toxicity, Dermal, Categorie 4, H312 Acute toxicity, Inhalation, Categorie 4, H332 Skin Corr. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335) STOT RE 1 (H372) Aquatic Acute 1 (H400) |
| Potassium iodide a.r. | 7681-11-0 | <10% | STOT RE 1 (H372) |

| Component | Reach Number |
|-----------------------|------------------|
| lodine, pellets p.a. | 01-2119485285-30 |
| Potassium iodide a.r. | 01-2119906339-35 |

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

4. First aid measures.

4.1 Description of first aid measures

General advice

First-aid personnel: ensure self-protection!

After inhalation: Fresh air.

After contact with skin: Wash off with plenty of water. Remove contaminated clothing.

After contact with eyes: Rinse out with plenty of water with the eyelid held wide open.

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After ingestion: Never give anything by mouth to an unconscious person. Make the victim drink plenty of water, induce vomiting. Call in physician.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. Fire fighting measures.

5.1 Extinguishing media

Suitable extinguishing media

In adaption to materials stored in the immediate neighbourhood.

Unsuitable extinguishing media

Prevent fire-fighting water from entering surface water or groundwater.

5.2 Special hazards arising from substance or mixture

Non-combustible.

5.3 Advice for firefighters

Do not stay in dangerous zone without self-contained breathing apparatus.

5.4 Further information

No data available

6. Accidental release measures.

6.1 Personal precautions, protective equipment and emergency procedures

When used appropriate no negative effects are known.

For personal protection see section 8.

6.2 Environmental precautions

Do not allow to enter sewerage system.

6.3 Methods and materials for containment and cleaning up

Absorb on vermiculite, sand or a pillow from Chemical Spill Center.

6.4 Reference to other sections

For disposal see section 13.

7. Handling and storage.

7.1 Precautions for safe handling

No special measures necessary. The product should be handled with the care usual when dealing with chemicals.

For precautions see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Closed in a well ventilated place.

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls - Personal protection.

8.1 Control parameters

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8.2 Exposure controls

Engineering measures

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

See section 7.1

Individual protection measures

Immediately change contaminated clothing. Wash hands after working with substance.

Respiratory protections

Required when vapours/aerosols are generated.

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Eye protection

Required.

Hand protection

Required.

Body protection

Not required.

Environmental exposure controls

Do not allow to enter sewerage system.

9. Physical and chemical properties.

9.1 Information on basic physical

<u>Appearence</u>

Form: Liquid
Colour: Brown
Odour: iodine

Changes in physical state

Melting Point: 0°C

Boiling point: 100°C

Flash point: -

Self Ignation temperature: -

Mol. Weight:

Density: 1,20 g/ml pH value: pH \pm 7 Solubility in water: soluble

Explosion limits:

9.2 Other data

No further relevant information available.

10. Stability and reactivity.

10.1 Reactivity

See section 10.3

10.2 Chemical stability

No further relevant information available.

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10.3 Possibility of hazardous reactions

Avoid contact with acids, metals, combustible materials, heat and sun light.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No further relevant information available.

11. Toxicological information.

11.1 Information on toxicological effects

Acute oral toxity LD50 orl. rat > 8000 mg/kg

Acute inhalation toxity

No further relevant information available.

Acute dermal toxity

No further relevant information available.

Skin irritation

No further relevant information available.

Eye irritation

No further relevant information available.

Sensitisation

No further relevant information available.

Germ cell mutagenicity

No further relevant information available.

Carcinogenicity

No further relevant information available.

Reproductive toxity

No further relevant information available.

Teratogenicity

No further relevant information available.

Specific target organ toxity - single exposure

No further relevant information available.

Specific target organ toxity - repeated exposure

No further relevant information available.

Aspiration hazard

No further relevant information available.

11.2 Further information

No further relevant information available.

Further data:

Handle in accordance with good industrial hygiene and safety practice...

12. Ecological information.

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12.1 Toxity

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

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

No further relevant information available.

12.6 Other adverse effects

Do not allow to enter waters, waste water, or soil!

13. Disposal considerations.

Product: Chemicals must be disposed of in compliance with the respective national regulations. Packaging: Chem-lab product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. Transport information.

| Land ' | Transport | (ADR/RID) |
|--------|-----------|-----------|
|--------|-----------|-----------|

14.1 UN number UN **14.2 Proper shipping name** -

14.3 Class

14.4 Packing group

14.5 Environmentally hazardousyes14.6 Special precautions for userno

Tunnel restriction code

Inland waterway transport (ADN)

Not relevant

Air Transport (IATA) 14.1 UN number

14.2 Proper shipping name 14.3 Class

14.4 Packing group

14.5 Environmentally hazardous yes **14.6 Special precautions for user** no

Sea Transport (IMDG)

14.1 UN number UN
14.2 Proper shipping name -

14.3 Class

14.4 Packing group

14.5 Environmentally hazardous yes **14.6 Special precautions for user** no

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

15. Regulatory information.

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

UN

For this product an assessment was not carried out.

15.2 Chemical Safety Assesment

For this product an assessment was not carried out.

16. Other information.

The information and recommendations in this MSDS are to the best of our knowledge, information and belief accurate at the date of publications. Although outmost care has been taken in the composition of this text, the publisher cannot be held responsible for any damage resulting from any possible error in this publications.

Full text of H-Statements referred to under sections 2 and 3.

- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.

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