# Lovibond<sup>®</sup> Water Testing

## **Tintometer® Group**



Reviewed on 07/22/2022

## Safety Data Sheet

acc. to OSHA HCS (HazCom 2012)

Printing date 07/22/2022

## **1 Identification**

- · Product identifier
- Trade name: Peracetic acid Indicator CL2A Tablets
- · Catalogue number: 56Z002698, 56T002690, 56T002630, 56U002690
- · CAS Number: 7681-11-0
- · 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

Specific Target Organ Toxicity - Repeated Exposure 1 H372 Causes damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

· Label elements

- · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Danger
- · Hazard-determining components of labeling:
- potassium iodide
- · Hazard statements
- H372 Causes damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.
- · Precautionary statements
- P264 Wash hands thoroughly after handling.
- P314 Get medical advice/attention if you feel unwell.

· Other hazards

The main intake pathways of potassium iodide are: inhalation of dust and solution aerosols, as well as oral ingestion.

## **3 Composition/information on ingredients**

- · Chemical characterization: Substances inorganic salt
- · CAS No. Description

CAS: 7681-11-0 potassium iodide

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#### · EC number: 231-659-4

### **4 First-aid measures**

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:
- Rinse opened eye for several minutes (at least 15 min) under running water. If symptoms persist, consult a doctor.
- After swallowing:
- Rinse out mouth and then drink 1-2 glasses of water.
- If symptoms persist consult doctor.
- Most important symptoms and effects, both acute and delayed headache sickness vomiting abdominal pain diarrhoea irritations after swallowing and inhalation: drop in blood pressure resorption cardiovascular disorders weakness
   Indication of any immediate medical attention and special treatment needed: Absorption: in case of iodine hypersensitivity, even after relatively low doses, acute respiratory and cardiovascular disorders (possibly shock), skin and mucous membrane reactions possible. (GESTIS)

Symptoms of poisoning may even occur after several hours.

## **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:

Potassium oxide

- Hydrogen iodide (HI)
- 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.
- 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.

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#### · 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:
- Take off immediately all contaminated clothing.

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
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
- Store locked up or with access restricted to technical experts or their assistants.
- Ensure that persons do not handle until all safety precautions have been read and understood.
- 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:

## CAS: 7681-11-0 potassium iodide

TLV (USA) Long-term value: 0.01 ppm A4; Skin; \*inhalation

• 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.
- Protection of hands:
- 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  $\leq$  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: Safety glasses
- use against the effects of fumes / dust
- Use protective goggles that have been tested and approved in accordance with government standards (like NIOSH).
- Body protection: Protective work clothing

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• 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 chemical properties · Appearance: · Form / Physical state: Tablets · Color: White Odorless · Odor: · Odor threshold: Not applicable. · pH-value: 7-9 · Melting point/freezing point: 681°C (1257.8°F) · Initial boiling point and boiling range: 1323°C (2413.4°F) (CAS: 7681-11-0 potassium iodide) · Flash point: Not applicable. Flammability (solid, gas): The substance is capable of catching fire or being set on fire. The product is not combustible. · Ignition temperature: >1300°C (>2372°F) (CAS: 7681-11-0 potassium iodide) Not applicable. · Decomposition temperature: Not applicable. · Auto-ignition temperature: Product is not self-igniting. · Danger of explosion: Product does not present an explosion hazard. · Flammability or explosive limits: · Lower: Not applicable. Upper: Not applicable. . Not applicable (solid). Oxidizing properties: none · Vapor Pressure at 20°C (68°F): <0.01 hPa (<0 mm Hg) (CAS: 7681-11-0 potassium iodide) Not applicable (solid) · Density at 20°C (68°F): 3.1 g/cm<sup>3</sup> (25.87 lbs/gal) · Relative density: Not determined. · Vapor density: Not applicable. · Evaporation rate: Not applicable. · Solubility(ies) · Water at 25°C (77°F): 1430 g/l Soluble. · Partition coefficient (n-octanol/water): Not applicable. · Viscosity: Kinematic: Not applicable (solid). · Other information Solids content: 100.0 %

## 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** Reacts with alkaline metals. Reacts with peroxides. Reacts with halogenated compounds. Reacts with oxidizing agents.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: see section 5

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### 11 Toxicological information

#### · Information on toxicological effects

• Acute toxicity: Based on available data, the classification criteria are not met.

#### · LD/LC50 values that are relevant for classification:

#### CAS: 7681-11-0 potassium iodide

Oral LD50 2779 mg/kg (rat)

(MERCK)

· Primary irritant effect:

- · on the skin: Based on available data, the classification criteria are not met.
- on the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.
- · Information on components: The following applies to iodides in general: Sensitation possible at predisposed persons.
- Carcinogenic categories

#### · IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

#### OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

• Other information: see section 8 / 15

· Synergistic Products: None

#### · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

· 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.

• STOT (specific target organ toxicity) -single exposure Based on available data, the classification criteria are not met.

#### • STOT (specific target organ toxicity) -repeated exposure

Causes damage to the thyroid through prolonged or repeated exposure. Route of exposure: Oral.

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

· Information on components:

OECD 414: Teratogenicity testing

OECD 473: Mutagenicity testing

OECD 471, 474, 476, 487: Germ cell mutagenicity testing

## CAS: 7681-11-0 potassium iodide

OECD 471 (negative) (Bacterial Reverse Mutation Test - Ames test)

· Additional toxicological information:

· Other information Other dangerous properties can not be excluded.

## 12 Ecological information

#### Toxicity

<ul> <li>Aquatic toxicity:</li> </ul>	
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#### CAS: 7681-11-0 potassium iodide

EC50 2.7 mg/l/24h (Daphnia magna)

LC50 8960 mg/l/96h (rainbow trout)

(ECOTOX)

• Persistence and degradability No further relevant information available.

· Other information: Methods for the determination of biodegradability are not applicable to inorganic substances.

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#### Trade name: Peracetic acid Indicator CL2A Tablets

#### · Bioaccumulative potential

CAS: 7681-11-0 potassium iodide

log Pow 0.04 (.)

(MERCK)

• Mobility in soil No further relevant information available.

 $\cdot$  Other adverse effects Avoid transfer into the environment.

## 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.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

4 Transport information	
· UN-Number · DOT, IMDG, IATA	none
<ul> <li>UN proper shipping name</li> <li>DOT, IMDG, IATA</li> </ul>	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.
<ul> <li>Transport in bulk according to Annex II of I and the IBC Code</li> </ul>	MARPOL73/78 Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

## 15 Regulatory information

Section 355 (Extremely hazardous substances):	
Substance is not listed.	
Section 313 (Specific toxic chemical listings):	
Substance is not listed.	
TSCA (Toxic Substances Control Act):	
ACTIVE	
Hazardous Air Pollutants	
Substance is not listed.	
Proposition 65	
Chemicals known to cause cancer:	
Substance is not listed.	
Chemicals known to cause reproductive toxicity for females:	
Substance is not listed.	

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Chemicals known to cause reproductive toxicity for males:	
Substance is not listed.	
Chemicals known to cause developmental toxicity:	
Substance is not listed.	
New Jersey Right-to-Know List:	
Substance is not listed.	
New Jersey Special Hazardous Substance List:	
Substance is not listed.	
Pennsylvania Right-to-Know List:	
Substance is not listed.	
Pennsylvania Special Hazardous Substance List:	
Substance is not listed.	
EPA (Environmental Protection Agency)	
Substance is not listed.	
NIOSH-Ca (National Institute for Occupational Safety and Health)	
Substance is not listed.	

Observe national regulations where applicable:

Employment restrictions concerning young persons 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.

#### · Date of preparation / last revision 07/22/2022 / -

#### 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<sup>®</sup> - 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 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 Specific Target Organ Toxicity - Repeated Exposure 1: Specific target organ toxicity (repeated exposure) - Category 1 Sources

Data arise from safety data sheets, reference works and literature.

ECHA: European CHemicals Agency http://echa.europa.eu GESTIS- Stoffdatenbank (Substance Database, Germany)