# Tintometer<sup>®</sup> Group Water Testing



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

Printing date 10.11.2023 Version number 41 (replaces version 40) Revision: 10.11.2023

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

- · 1.1 Product identifier
- · Product name: DPD No. 2
- · Catalog number: 00511531, 511530BT, 4511530BT, 511531BT, 4511531BT, 511532BT, 00511539BT
- 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

The Tintometer Limited Lovibond® House Sun Rise Way Amesbury Wiltshire SP4 7GR United Kingdom

• 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



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- · 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



GHS07

- Signal word Warning
- · Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective clothing / eye protection.

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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P337+P313 If eye irritation persists: Get medical advice/attention.

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- · 2.3 Other hazards No further relevant information available.
- · 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: Mixture of inorganic compounds.

<ul> <li>Dangerous</li> </ul>	components:
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CAS: 7758-02-3 potassium bromide EINECS: 231-830-3

Eye Irrit. 2, H319

70–80%

· 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 Instantly remove any clothing soiled by the product.
- · After inhalation Supply fresh air; consult doctor in case of symptoms.
- · After skin contact Instantly wash with water and soap and rinse thoroughly.
- After eye contact Rinse opened eye for several minutes (at least 15 min) under running water. Then consult doctor.
- · After swallowing

Rinse out mouth and then drink 1-2 glasses of water.

In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed:

irritations

after inhalation:

mucosal irritations, cough, shortness of breath

after swallowing of large amounts:

general feeling of sickness

vomitina

sickness

cramps

disorientation

cardiovascular disorders

· 4.3 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)

#### **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.

Can be released in case of fire:

Hydrogen chloride (HCI)

hydrogen bromide (HBr)

Dipotassium oxide

- 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.

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Ambient fire may liberate hazardous vapours.

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#### **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.

Ensure adequate ventilation

- · Advice for emergency responders: Protective equipment: see section 8
- · 6.2 Environmental precautions: Do not allow product to reach sewage system or water bodies.
- 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Collect mechanically.

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: No special precautions necessary if used correctly.
- · Hygiene measures:

Avoid contact with the eyes.

Take off immediately all contaminated clothing.

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.
- Information about storage in one common storage facility: Store away from oxidising agents.
- · Further information about storage conditions:

Protect from heat and direct sunlight.

Store in cool, dry conditions in well sealed containers.

Protect from the effects of light.

Protect from humidity and keep away from water.

This product is hygroscopic.

- 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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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.

- · 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
- Eye/face protection

Safety glasses

Use safety glasses that have been tested and approved in accordance with government standards such as EN 166.

· Hand protection

Protective gloves.

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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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

- · Other skin protection (body protection): Protective work clothing.
- · Breathing equipment: Use breathing protection against the effects of fumes/dust/aerosol.
- · Recommended filter device for short term use: Filter P2
- · 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 Solid. · Form: **Tablets** White · Colour: · Odour: Odourless · Odour threshold: Not applicable. · Melting point/Freezing point: 730°C (CAS 7758-02-3)

Boiling point or initial boiling point and boiling range Not determined.

Flammability The product is not combustible. **Explosive properties:** Product is not explosive.

· Lower and upper explosion limit

Lower: Not applicable. Not applicable. Upper: Flash point: Not applicable. **Auto-ignition temperature:** Not applicable (solid). · Decomposition temperature: Not applicable.

· pH (15.2 g/l) at 20°C 5.8

· Kinematic viscosity Not applicable (solid).

· Solubility

· Water: Soluble

· Partition coefficient n-octanol/water (log value) Not applicable (mixture). Not applicable.

· Vapour pressure:

· Density and/or relative density

Density at 20°C: 1.55 g/cm3 Relative density: Not determined. Relative gas density Not applicable (solid). · Particle characteristics Not determined.

· 9.2 Other information

· Information with regard to physical hazard classes

· Corrosive to metals Void

· Other safety characteristics

Oxidising properties: none

Additional information

· Solids content: 100 %

#### **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 halogenated compounds

Reacts with acids and oxidising agents.

- --> forms heat
- · 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: see section 5

#### **SECTION 11: Toxicological information**

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · LD/LC50 values that are relevant for classification:

CAS: 7758-02-3 potassium bromide

Oral LD50 3070 mg/kg (rat)

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Causes serious eye irritation.
- · Information on components:

CAS 7758-02-3: chronic: dermatitis

#### CAS: 7758-02-3 potassium bromide

Irritation of skin OECD 404 (rabbit: no irritation) Irritation of eyes OECD 405 (rabbit: irritation)

- Respiratory or skin sensitisation 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.

	The state of the s	
CAS: 7758-02-3 potassium bromide		
	(guinea pig: negative) (EPA OPP 81-6: Guinea pig maximisation test) in analogy to similar products	

- · 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.
- · Information on components:

OECD 414: Teratogenicity testing

OECD 473: Mutagenicity testing

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

#### CAS: 7758-02-3 potassium bromide

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

- STOT (specific target organ toxicity) -single exposure Based on available data, the classification criteria are not met.
- · STOT (specific target organ toxicity) -repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.
- · Additional toxicological information:

iodide: chronic hypothyroidism

lodine salts can cause birth defects, illness and death of a fetus. (GESTIS)

#### CAS: 7758-02-3 potassium bromide

(source: GESTIS)

Main toxic effects:

acute: gastrointestinal irritation, vomiting, skin changes and CNS effects (systemic)

chronic: neurotoxic effects and skin damage (bromism)

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

According to the information available to us, the chemical, physical and toxicological properties of the substances mentioned in Chapter 3 have not been thoroughly investigated.

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### **SECTION 12: Ecological information**

#### · 12.1 Toxicity

· Aquatic toxicity:		
CAS: 7758-02-3 potassium bromide		
	>100 mg/l/48h (Daphnia magna) (OECD 202) (Merck)	
	≥100 mg/l/48h (Daphnia magna) (OECD 202) (Merck)	
	>45 mg/l/96h (fathhead minnow) (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 Avoid transfer into the environment.
- · Water hazard:

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system. Must not reach sewage water or drainage ditch undiluted or unneutralised.

#### **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

- · 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	Void
· 14.2 UN proper shipping name	
· ADR, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
14.5 Transport nazaru ciass(es)	
· ADR, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO	
instruments	Not applicable.
monuments	Not applicable.

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Transport/Additional information:
 Not dangerous according to the above specifications.

#### **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

None of the ingredients is listed.

- · 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)

None of the ingredients is listed.

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 ≥ 0.1% (w / w).

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 ≥ 0.1% (w / w).

- · Directive 2012/18/EU (SEVESO III):
- Named dangerous substances ANNEX I None of the ingredients is listed.
- · Information about limitation of use: Not required.
- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **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 Sheets 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

H319 Causes serious eye irritation.

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#### · 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)

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 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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

ECHA: European CHemicals Agency http://echa.europa.eu

IUCLID (International Uniform Chemical Information Database)

GESTIS- Stoffdatenbank (Substance Database, Germany)

\* Data compared to the previous version altered.

GB