

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

Printing date 18.07.2018

Version number 11

Revision: 17.07.2018

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

· 1.1 Product identifier

· Product name: **DPD No. 1 Rapid**

· **Catalog number:**

00511311, 511310BT, 4511310BT, 511311BT, 4511311BT, 511312BT, 4511312BT, 511521BT, 511522BT, 00511319BT, 511314BT, 511520BT

· 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

phone: +49 231 94510-0
e-mail: sales@tintometer.de

Tintometer GmbH
Division AQUALYTIC®
Schleefstr. 12
44287 Dortmund
Made in Germany
www.aqualytic.de

phone: +49 231 94510-755
e-mail: sales@aqualytic.de

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

phone : +44 1980 664800
e-mail: SDS@tintometer.com

· **Informing department:**

e-mail: sds@tintometer.de
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**

The product is not classified as hazardous according to the CLP regulation.

· 2.2 Label elements

· **Labelling according to Regulation (EC) No 1272/2008** Void

· **Hazard pictograms** Void

· **Signal word** Void

· **Hazard statements** Void

· **Additional information:**

EUH210 Safety data sheet available on request.

· **2.3 Other hazards** No further relevant information available.

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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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture of organic and inorganic compounds

Dangerous components:

| | | | |
|-------------------|-------------|--------------------|--------|
| CAS: 77-92-9 | citric acid | Eye Irrit. 2, H319 | 5-<10% |
| EINECS: 201-069-1 | | | |

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 under running water (at least 15 min). If symptoms persist, 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 swallowing of large amounts:

thirst

sickness

vomiting

gastric pain

diarrhoea

general feeling of sickness

cardiovascular disorders

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 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.

Sulphur oxides (SO_x)

Nitrogen oxides (NO_x)

Phosphorus oxides (P_xO_x)

Dipotassium oxide

Sodium 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.

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.
Avoid causing dust.
- **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:**
The usual precautionary measures should be adhered to general rules for handling chemicals.
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**
- **Storage**
- **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.
Protect from the effects of light.
Store under dry conditions.
Protect from humidity and keep away from water.
- **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.
- **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.
- **Personal protective equipment**
- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.
- **Recommended filter device for short term use:** Filter P1
- **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: ≥ 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.
- **Eye protection:**
Safety glasses

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- use against the effects of fumes / dust
- **Body protection:** Protective work clothing.
- **Limitation and supervision of exposure into the environment:** 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 | |
| · Appearance: | |
| Form / Physical state: | Tablets |
| Colour: | White |
| · Odour: Odourless | |
| · Odour threshold: Not applicable | |
| · pH-value (11.25 g/l) at 20°C: 6.2 | |
| · Melting point/Freezing point: Not determined | |
| · Initial boiling point and boiling range: Not determined | |
| · Flash point: Not applicable | |
| · Flammability (solid, gas): The product is not combustible. | |
| · Decomposition temperature: Not determined. | |
| · Auto-ignition temperature: Product is not self-igniting. | |
| · Explosive properties: Product is not explosive. | |
| · Flammability or explosive limits: | |
| Lower: | Not applicable |
| Upper: | Not applicable |
| · Oxidising properties: none | |
| · Vapour pressure: Not applicable. | |
| · Density: Not determined | |
| · Relative density: Not determined. | |
| · Vapour density: Not applicable. | |
| · Evaporation rate: Not applicable. | |
| · Solubility(ies): | |
| Water: | Soluble |
| · Partition coefficient: n-octanol/water: Not applicable. | |
| · Viscosity: Not applicable. | |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| Solids content: | 100.0 % |
| · 9.2 Other information No further relevant information available. | |

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**
Aqueous solution reacts with metals.
Citric acid: incompatible with bases, strong oxidizers, amines. Contact with metal nitrates may be explosive. Attacks aluminum, copper, zinc und their alloys, when wet.
Reacts with acids, alkalis and oxidizing agents
Reacts with ammonia (NH₃).
- **10.4 Conditions to avoid** Strong heating (decomposition)
- **10.5 Incompatible materials:**
metals
aluminium

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· **10.6 Hazardous decomposition products:** see section 5

SECTION 11: Toxicological information

· **11.1 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: 77-92-9 citric acid

| | | |
|--------|------|---|
| Oral | LD50 | 3000 mg/kg (rat) (IUCLID) |
| Dermal | LD50 | >2000 mg/kg (rat) (limit test: there were no deaths) |

· **Primary irritant effect:**

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Information on components:**

CAS 6283-63-2: DPD may cause allergic skin reaction

Citric acid: A single drop of a 2% or 5% solution in water causes little or no irritation.

A 0.5% solution held in contact with the eye causes irreversible tissue damage to the cornea.

Citric Acid caused mild irritation when 500 mg was tested on rabbit skin in a 24-hour test.

(CHEMINFO, Canadian Centre for Occupational Health and Safety)

CAS: 77-92-9 citric acid

| | | |
|--------------------|----------|------------------------------|
| Irritation of skin | OECD 404 | (rabbit: no irritation) |
| Irritation of eyes | OECD 405 | (rabbit: severe irritations) |

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

· **Information on components:**

CAS 6283-63-2 (DPD): Sensitization possible in predisposed persons.

CAS: 77-92-9 citric acid

| | | |
|---------------|----------|---|
| Sensitisation | OECD 406 | (guinea pig: negative) (EPA OPP 81-6: Guinea pig maximisation test) |
|---------------|----------|---|

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** The following statements refer to the mixture:

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

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

· **Information on components:**

CAS: 77-92-9 citric acid

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

· **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

CAS: 77-92-9 citric acid

| | |
|------|---|
| EC50 | ~120 mg/l (Daphnia magna) (72 h) (IUCLID) |
| EC5 | 485 mg/l (Entosiphon sulcatum) (72h) (MERCK) |
| LC50 | 440–760 mg/l/96h (gold orfe) (IUCLID) |

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- **Bacterial toxicity:**
sulphates toxic > 2.5 g/l

CAS: 77-92-9 citric acid

 EC5 >10000 mg/l (*Pseudomonas putida*) (16h (Lit.))

- **Other information:**
Toxic for fish:
sulphates > 7 g/l

- **12.2 Persistence and degradability**

CAS: 77-92-9 citric acid

OECD 301 B 97 % / 28 d (readily biodegradable) (CO2 Evolution Test)

OECD 302 B 98 % / 2 d (readily eliminated from water) (Zahn-Wellens / EMPA Test)

- **12.3 Bioaccumulative potential**

Pow = n-octanol/wasser partition coefficient

log Pow < 1 = Does not accumulate in organisms.

CAS: 77-92-9 citric acid

log Pow -1.72 (.) (OECD 117, 20°C)

- **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 Other adverse effects**

Depending on the concentration, phosphorus and/or nitrogen compounds may contribute to the eutrophication of water supplies. Avoid transfer into the environment.

- **Water hazard:**

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

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.

Disposal must be made according to official regulations.

- **European waste catalogue**

16 05 09 discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

- **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**

· ADR, IMDG, IATA

Void

- **14.2 UN proper shipping name**

· ADR, IMDG, IATA

Void

- **14.3 Transport hazard class(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 Transport in bulk according to Annex II of Marpol and the IBC Code**

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**

· **Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:**

None of the ingredients is listed.

· **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.

· **Relevant phrases**

H319 Causes serious eye irritation.

· **Training hints** Provide adequate information, instruction and training for operators.

· **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 européen sur le transport 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

vPvB: very Persistent and very Bioaccumulative

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

· **Sources**

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

IUCLID (International Uniform Chemical Information Database)