

Product
Smart PO₂
 POWERFUL DOUBLE OXIDATION

Version: 1.0
 Printing Date: 16.07.2025
 Language: EN

Watch® Water encourages and expects you to read and understand the entire MSDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1	IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
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Product Name:	Smart PO₂
Application:	Wastewater Treatment
Company Identification/Supplier	Watch Water GmbH Fahrlachstr. 14 D-68165 Mannheim Germany Phone: + 49 62187951-0 Fax: + 49 62187951-99
Emergency Number (European) (24/7)	112
Emergency Number (Company) (08:00- 16:45)	Phone: +49 621 87951-50

2	HAZARDS IDENTIFICATION
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Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

This product requires labelling or classification according to 2008/1272/EC

Symbol:



Hazard statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage
H412	Harmful to aquatic life with long lasting effects.

General Precaution Instructions:

P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray
P262	Do not get in eyes, on skin, or on clothing.
P273	Avoid release to the environment
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

Safety instructions (recommendations):

P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention
P315	Get immediate medical advice/ attention.

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Safety instructions (Storage)

Keep container tightly closed and in a well-ventilated place

Other hazards

The product does not contain any components considered to be either persistent, bioaccumulative and toxic

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 COMPOSITION / INFORMATION ON INGREDIENTS

- Chemical characterization: solid mixture

Component Name	CAS-Nr.	Chemical Name	Conc. (%)
Potassium	7740-09-7	Potassium-based inorganic salt	>= 85 – <= 95
Inorganic acidifier	5329-14-6	Acid-based stabilizing agent	>= 1 – < 5
Iron compound	7439-89-6	Inorganic ferric derivative	>= 3 – < 10
Proprietary	Proprietary	Proprietary	Proprietary

Amounts specified are typical and do not represent a specification. Some ingredients are withheld as proprietary. Hazard information is fully disclosed.

4 FIRST-AID MEASURES

- **General Information:**
Take off contaminated clothes. Wash immediately with plenty of water. Continue rinsing for at least 10 minutes. Symptoms of poisoning may appear several hours later. If any symptom persists, seek medical attention.
- **Eye contact:** Rinse immediately with plenty of running water. Continue for at least 15 minutes. Seek medical advice.
- **Skin contact:** Remove contaminated clothing. Wash immediately with plenty of water. Continue for at least 15 minutes. Obtain medical advice if there are persistent symptoms.
- **Inhalation:** Remove patient to fresh air, allow to rest and keep warm. In case of unconsciousness place patient stably in side position for transportation. Obtain medical advice.
- **Ingestion:** First rinse mouth with water. Do not induce vomiting. Keep respiratory tract clear, if victim is fully conscious. Seek medical attention.

Note to physician:

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5 FIRE FIGHTING MEASURES

- **Extinguishing media:** Extinguish with water, Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical
- **Unsuitable extinguishing media:** High volume water jet
- **Exposure hazards:** harmful gases
- **Combustion products:** Irritant, caustic, flammable, noxious/toxic gases and vapours can develop in the case of fire and decomposition
- **Protective equipment:** Firefighters and other exposed, wear self-contained breathing apparatus and protective suit.

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6 ACCIDENTAL RELEASE MEASURES

- The product forms a slippery surface in contact with water.
- **Personal precautions:** Wear eye protection and protective clothing. Avoid dust formation. Avoid breathing dust
- **Environmental precautions:** Keep out of drains and water courses.
- **Methods for cleaning up:** Clear spills immediately. Vacuum or sweep up material and placed in a designated waste container. Avoid dust formation.
- **Disposal method:** The material be disposed in accordance with applicable local, state and federal regulations.

7 HANDLING AND STORAGE

- **Handling:**
 Normal chemical handling.
 Dust mask should be used when large quantities are used in the absence of good local exhaust ventilation.
 Avoid the formation and deposition of dust.
 Take precautionary measures to avoid static charges. Wash hands after handling.
 Provide appropriate exhaust ventilation at places where dust is formed.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Smoking, eating and drinking should be prohibited in the application area.
- **Storage:** Store in a dry place. Keep container sealed and dry. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Storage stability: No decomposition if stored normally.
- The relevant fire protection measures should be noted.

8 EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure limit: no specific value; the national exposure limit for dust should be observed.

Personal protective equipment:

- **Respiratory protection:** Respiratory protection if dust is formed. In case of insufficient ventilation, use an appropriate approved particulate respirators (for example EN 143 or 149, type P2 or FFP2).
- **Eye protection:** Safety glasses with side-shields (frame goggles). Where eye contact or dusty conditions may be likely, dust tight goggles are recommended.
- **Hands:** Chemicals resistant gloves butyl-rubber protective gloves of 0.5 mm glove thickness.
- **Skin protection:** Wear appropriate protective clothing. Avoid skin contact with the spilled product.
- **General protective and hygienic measures:** Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

9 PHYSICAL AND CHEMICAL PROPERTIES

General Information:	
Physical State	Solid mixture
Appearance	Powder, Light Reddish
Odor	weak, product specific
Flash point:	Not flammable, decomposes over 85°C
Bulk density:	ca. 1200 - 1400 kg/m ³
Solubility Water solubility	280 - 340 g/l
Ignition temperature	No data available
pH	2.0 – 2.5 (in 1% solution)

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10 STABILITY AND REACTIVITY

- **Reactivity and Chemical Stability:** Stable under recommended storage conditions
- **Thermal decomposition/conditions to be avoided:** No decomposition if used according to specifications. Avoid storing at high temperatures or in direct sunlight.
- **Materials to avoid:** Avoid moisture or impurities can noticeably reduce the self-accelerating decomposition temperature
- **Conditions to avoid:** No data available
- **Hazardous decomposition products:** In case of fire and decomposition Irritant, caustic, flammable, noxious/toxic gases and vapours can develop

11 TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute toxicity****Harmful if swallowed**

Oral LD50 (oral, rat) 500 mg/kg

Method: OECD Test Guideline 423

Acute inhalation toxicity

LC0 (Rat): > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhalation toxicity

Remarks: Expert judgement

Acute dermal toxicity

LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 402

Carcinogenicity

Not classified based on available information

Aspiration toxicity

Not classified based on available information.

Primary irritant effect:

Skin (rabbit): Irritant to skin and causes severe burn

Eye (rabbit): Irritant and Causes serious eye damage.

12 ECOLOGICAL INFORMATION**Toxicity**

- **Aquatic toxicity:**
Toxicity to fish: NOEC (Oncorhynchus mykiss (rainbow trout)): 0,5 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to fish (Chronic toxicity): NOEC: 0,5 mg/l
Exposure time: 37 d
- **Toxicity to microorganisms:**
EC50 (Bacteria): 100 mg/l

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Exposure time: 3 h
 Method: OECD Test Guideline 209.

- **Ecotoxicology Assessment:**
Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.
- **Persistence and degradability:**
not applicable
- **Bio-accumulative potential:**
Not applicable
- **Mobility in soil:**
No further relevant information available.
- **Additional ecological information:**
Do not release untreated into natural waters.

The product has not been tested. The statement has been derived from the properties of the individual components.

- **Results of PBT and vPvB assessment**
Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

13 DISPOSAL CONSIDERATIONS

- **Recommendation:** must not be disposed together with household solid waste. Do not allow product to reach sewage system. Dispose of wastes in an approved waste disposal facility
- Disposal must be made according to official and local regulations.

14 TRANSPORT INFORMATION

- **Land Transport (ADR/RID/ADN):** Not classified as dangerous good under transport regulations
- **Sea Transport (IMDG/IMO):** Not classified as dangerous good under transport regulations
- **Air Transport (IATA/ICAO):** Not classified as dangerous good under transport regulations

15 REGULATORY INFORMATION

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EC) No 850/2004 on persistent organic pollutants : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

National regulations:

Water hazard class (Germany): Water hazard class 1 (Anex 4 VwVwS): slightly hazardous for water.

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16 | OTHER INFORMATION

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