

Product

SOLAROXY – 3C*SUPER ADVANCED OXIDATION MATERIAL*Version: 1.0
Printing Date: 01.06.2019

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 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: SOLAROXY-3C

Application: Water Treatment

Company Identification/Supplier Watch Water GmbH
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2 HAZARDS IDENTIFICATION**Classification of the substance or mixture**

- **Classification according to Regulation (EC) No. 1272/2008**
This product does not require labeling or classification according to 2008/1272/EC.
- **Classification according to Directives 67/548/EEC and 1999/45/EC**
This product does not require labeling or classification according to Directive 67/548/EEC or 1999/45/EC.

Labeling:

- **Labeling according to Regulation (EC) No 1272/2008**
This product does not require labeling according to 2008/1272/EC.
- **Labeling according to Directive 67/548/EEC or 1999/45/EC**
This product does not require labeling according to 67/548/EEC or 1999/45/EC

Potential health effects:

Primary route of entry: inhalation, skin contact, eye contact, ingestion. Aggravation of pre-existing conditions: respiratory disorder

Inhalation: No adverse effects are anticipated from single exposure to dust.

Ingestion: Not expected to be a health hazard via ingestion. Harmful effects not anticipated from swallowing small amounts.

Skin Contact: Not expected to be irritating.

Eye Contact: May cause irritation of eyes. Abrasive action of dust particulate may damage eye.

Other hazards

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

Results of PBT and vPvB assessment

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

3 COMPOSITION / INFORMATION ON INGREDIENTS

- Chemical characterization: Powder

Component, name	CAS-Nr.	Chemical Name	Conc. (%)
Titanium dioxide	12026-28-7	TiO ₂	15 - 27%
proprietary	proprietary	proprietary	73 - 85%

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Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous and/or present at amounts below reportable limits.

4 FIRST-AID MEASURES

- **General Information:** Take off contaminated clothes. Wash immediately with plenty of water. Continue rinsing for at least 10 minutes. 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. Immediately give 1-2 glasses of water, 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
- **Unsuitable extinguishing media:** High volume water jet
- **Exposure hazards:** harmful gases
- **Combustion products:** carbon oxides, nitrogen oxides
- **Protective equipment:** Firefighters and other exposed, wear self-contained breathing apparatus and protective suit.

6 ACCIDENTAL RELEASE MEASURES

- The product forms a slippery surface in contact with water.
- **Personal precautions:** Wear eye protection and protective clothing.
- **Environmental precautions:** Keep out of drains and water courses.
- **Methods for cleaning up:** 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.
- **Storage:** Protect from sun. Store in a dry, cool place. Keep container sealed and dry.
- 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.
- **Skin protection:** Wear appropriate protective clothing. Avoid skin contact with the spilled product.

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- **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	Crystalline (Triclinic) powder
Appearance	white
Odor	weak
Flash point:	Not flammable, decomposes over 85°C
Bulk density:	ca. 980 - 1020 kg/m ³
pH	2 - 2.5 (in 5% solution)
Solubility in water at 20°C:	Non soluble

10 STABILITY AND REACTIVITY

- **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:** Contact with strong oxidizing agents and alkaline substances.
- **Conditions to avoid:** Dust formation
- **Hazardous decomposition products:** None when used according to specifications

11 TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute toxicity**

Oral LD50 (oral, rat) >1000 mg/kg

Primary irritant effect:

Skin (rabbit): Irritant to skin and mucous membranes
 Eye (rabbit): Irritant

Listed carcinogenic:

IARC: Yes, Possible human carcinogen (2B)

ACGIH: No

Developmental Toxicity

For the component(s) tested: Did not cause birth defects or any other fetal effects in laboratory animals.

Genotoxicity: not genotoxic under the conditions of the Ames test and Comet assay

Animal genetic toxicity studies were negative.

12 ECOLOGICAL INFORMATION**Toxicity**

- **Aquatic toxicity:**
LC50 (Leuciscus idus, 96 hours) > 3500 mg/l
- **Toxicity to microorganisms:**
Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.
- **Persistence and degradability:**
not applicable
- **Bio-accumulative potential:**

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No bioaccumulation is to be expected, log P(o/w)<0.3

- **Mobility in soil:**
No further relevant information available.
- **Additional ecological information:**
Do not release untreated into natural waters.
- **Ecotoxicity:**
LC0 (acute and prolonged, Leuciscus Idus) > 1000 mg/l
EC50 (acute, Daphnia Magna, 48h) > 1000 mg/l (OECD 202)
NOEC (Pseudomonas Putida) > 1000 mg/l
- **Environmental Fate:**
Not biodegradable because it is an inorganic product, No known significant effects or critical hazards.

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

- **Results of PBT and vPvB assessment**
PBT: Not applicable.
vPvB: Not applicable.

13 DISPOSAL CONSIDERATIONS

- **Recommendation:** must not be disposed together with household solid waste. Do not allow product to reach sewage system.
- **Recommendation:** Disposal must be made according to official 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
Labelling according to Regulation (EC) No 1272/2008

National regulations:

Water hazard class (Germany): Water hazard class 1 (Anex 2 VwVwS): slightly hazardous for water.

16 OTHER INFORMATION

- This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual relationship.
- **Disclaimer:**
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