

Safety Data Sheet

1. PRODUCT AND COMPANY INFORMATION

Chemical name: **CHLORINE DIOXIDE AQUEOUS SOLUTION, ClO₂, < 3%**

Producer: SugarSwitch Ltd.

2. Ingredients

Chlorine Dioxide Molecular formula ClO₂ Concentration 0.3% (3,000 ppm) dissolved pure water
Molecular formula H₂O Concentration > 99.7% (> 997,000 ppm)

3. HAZARDS IDENTIFICATION

This Product is not a hazardous substance according to the EG directives or GGVS

4. FIRST-AID MEASURES

Inhalation: Ensure access to fresh air if chlorine dioxide has been inhaled.

Skin contact: Wash the skin with water if irritated.

Eye contact: Rinse immediately with water.

5. ACCIDENTAL RELEASE MEASURES

Environmental precautions: Spills of chlorine dioxide solutions should be diluted to a low concentration using copious amounts of water and ventilate the area.

Methods for cleaning up: Dilute with copious amounts of water and mop up.

6. HANDLING AND STORAGE

Handling: Ensure necessary ventilation in work areas in which Chlorine Dioxide Solution is being used.

Safe handling advice: Avoid inhalation, skin and eye contact.

Storage conditions: Chlorine dioxide Solution should be stored in a fridge when not in use. Increased temperature may cause gas vaporisation and may lead to decomposition.

7. EXPOSURE CONTROLS

Limit value: $0.3 \text{ mg/m}^3 = 0.1 \text{ ppm}$

Technical measures: Efficient ventilation in buildings in which chlorine dioxide is handled.

8. STABILITY

Chlorine dioxide aqueous solution is an oxidising agent, which is stable as long as the solution is stored in cold and dark conditions, Chlorine Dioxide Solution can break down into other chlorine derivatives such as chloride.

9. ECOTOXICOLOGICAL INFORMATION

Mobility: Chlorine dioxide absorbed into water has low volatility.

Bioaccumulation: Chlorine dioxide is quickly converted into the products of its decomposition. There is no evidence to show bioaccumulation in animals.

Ecotoxicity: Chlorine dioxide is toxic to aquatic organisms in high concentrations. Lowest specification for fish is $\text{LC}_{50} = 0.02 \text{ mg/dm}^3$ (96 h, *Pimephales promelas*)

10. DISPOSAL CONSIDERATIONS

Waste: Small quantities can be disposed of in the drainage system.

11. TRANSPORT INFORMATION

Chlorine dioxide aqueous solution in concentrations of < 3% has not been classified as hazardous goods.

12. OTHER INFORMATION

Recommended use: The major uses of Chlorine Dioxide Solution are for Drinking Water Purification and as a disinfectant. Follow the instructions for use, failure to do so may lead to injury to persons or damage to property.