

# Material Safety Data Sheet

## TwinOxide Australia

Tradename: **TwinOxide® 0.3% Solution**  
(Result from adding TwinOxide® Component A & B into a designated amount of water)

**TM001-01**

Chemical Product	TwinOxide® 0.3% Solution
<b>1. Identification</b>	Produced in the EC Distributed in Australia by: TwinOxide Australia Pty Ltd Address: 8 Cocos Court Patterson Lakes, Vic 3197 Phone: +61 3 9772-5025 Email: <a href="mailto:info@twinoxide.com.au">info@twinoxide.com.au</a> <b>Emergency Telephone Number 0437 284 376</b>
<b>2. Hazards Identification</b> - Hazard Classification: - Risk Phrases: - Safety Phrases:	HAZARDOUS SUBSTANCE - DANGEROUS GOOD R36 - Irritating to eyes. S1/2 - Keep locked up and out of the reach of children. S23 - Do not breathe vapour or spray. S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28 - After contact with skin, wash immediately with plenty of water. S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection. S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S61 - Avoid release to the environment. Refer to special instructions/MSDS's.
<b>3. Composition / Information on Ingredients</b> - Chemical characterization:	- Solution containing Chlorine Dioxide (3 g/L) (CAS 10049-04-4) - Non-hazardous inorganic compounds
<b>4. First Aid Measures</b> - General Indications: - After Skin Contact: - After Eye Contact:  - After Ingestion:  - Directions for the Doctor:	- Body and eye protection required. - Instantly flush with copious amounts of water and soap or mild detergent. - With open eyelid, instantly flush with copious amounts of lukewarm water for minimum 15 minutes and seek medical attention. - Flush mouth with water. - Instantly drink water in small quantities. - Immediately seek medical attention. - Stomach flush with gastroscopic view.
<b>5. Fire Fighting Measures</b> - Extinguishing Media: - Unsuitable Extinguishing Media: - Hazards from Combustion Products: - Fire Fighting Instructions: - Hazchem Code:	- Water and foam. - None - A fire breakout may cause dangerous smoke gas: chlorine dioxide. - Wear protective clothing and self-contained breathing apparatus. - 2X
<b>6. Accidental Release Measures</b> - Emergency Procedures: - Personal Protection: - Security Rules: - Cleaning Directions:	- Prevent spill from entering drains, sewers or any body of water - Wear protective clothing and respiratory equipment as described in Section 8 - Recover product and place in an appropriate airtight container - Ventilate and clean the spill area with equipment - Avoid formation of dust - Rest spill rinse with soda solution and plenty of water
<b>7. Handling and Storage</b> - Handling:  - Fire and Explosion Protection Indications:  - Storage: - Storage Room: - Requirements of Containers:  - Combined Storage:	- Keep away from dirt; - Store only in a designated vessel or container; - Follow Dosage instructions; - Wear protective gloves and respiratory equipment; - Protect against humidity. - Avoid heat; - Keep away from acids, and combustible materials. - Dark and Cool storage. - Cool, dry, clean and locked, good ventilation. - Useable materials are: PE, PP, PVC (preferably dark); - Keep containers dry and clean with air-sweep. - Keep away from metal salts, alkaloids, reducers and combustible materials.

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Chemical Product	TwinOxide® 0.3% Solution
<p><b>8. Exposure Controls / Personal Protection</b></p> <p>- National Exposure Standards: Personal Protective Equipment (PP)</p> <p>- General</p> <p>- Skin</p> <p>- Inhalation</p> <p>- Eyes</p> <p>- Hand Protection</p>	<ul style="list-style-type: none"> <li>- No exposure standards have been assigned by NOHSC for this product</li> <li>- Keep away from food and beverages;</li> <li>- When touching clothing immediately rinse with water</li> <li>- Always wash hands after handling TwinOxide.</li> <li>- Avoid skin contact. Wear protective clothing</li> <li>- Avoid inhalation of chlorine dioxide at any time. Always wear respiratory equipment when handling TwinOxide® 0.3% Chlorine Dioxide Solution to avoid inhalation of ClO<sub>2</sub> gas fumes.</li> <li>- Wear goggles.</li> <li>- Wear PVC protective gloves.</li> </ul>
<p><b>9. Physical and Chemical Properties</b></p> <p>- Physical State/Appearance:</p> <p>- Colour:</p> <p>- Odour:</p> <p>- Solubility:</p> <p>- Specific Gravity:</p> <p>- Flammability:</p>	<ul style="list-style-type: none"> <li>- Liquid Solution</li> <li>- Pale Yellow.</li> <li>- Similar to chlorine.</li> <li>- Unlimited</li> <li>- 1,150 g/L</li> <li>- Combustible liquid</li> </ul>
<p><b>10. Stability and Reactivity</b></p> <p>- Chemical Stability:</p> <p>- Conditions to Avoid:</p> <p>- Incompatible Materials:</p> <p>- Hazardous Decomposition:</p>	<ul style="list-style-type: none"> <li>- Product is fire enhancer (contact with other combustible goods might cause ignition)</li> <li>- Product is oxidative.</li> <li>- Heating reactions.</li> <li>- Metal salts (Transformation)</li> <li>- Reducing Agents (Transformation)</li> <li>- Oxidizers (Gas formation)</li> <li>- Acids (Gas formation)</li> <li>- Combustibles (Fire Danger)</li> <li>- None known</li> </ul>
<p><b>11. Toxicological Information</b></p> <p>- Health Effects</p> <p>- Acute Oral Toxicity:</p> <p>- Dermal Toxicity:</p> <p>- Irritant on Skin:</p>	<ul style="list-style-type: none"> <li>- Health damage after ingestion.</li> <li>- Skin eruptions may occur after direct contact.</li> <li>- Causes corrosion injuries.</li> <li>- Chlorine dioxide gas fumes cause respiratory problems.</li> <li>- Corrosive injuries in mouth and oesophagus</li> <li>- Corrosive</li> <li>- Corrosive</li> </ul>
<p><b>12. Ecological Information</b></p> <p>- Fish Toxicity:</p> <p>- Bacteria Toxicity:</p> <p>- Environmental Fate:</p>	<ul style="list-style-type: none"> <li>- LC<sub>50</sub> (96 h) = 500 – 100 mg/L (<i>Brachydanoio rerio</i>, OECD 203).</li> <li>- No data available.</li> <li>- No data available.</li> </ul>
<p><b>13. Disposal Considerations</b></p> <p>- Disposal Methods:</p> <p>- Special Precautions for Landfill or Incineration</p>	<ul style="list-style-type: none"> <li>- Use TwinOxide Neutralizer (ask your supplier).</li> <li>- Dispose of excess product as per local regulations.</li> <li>- Empty containers and product should not be burnt.</li> </ul>
<p><b>14. Transport Information</b></p> <p>- UN Number:</p> <p>- Proper Shipping Name:</p> <p>- Class and Subsidiary Risk:</p> <p>- Packing Group:</p> <p>- Hazchem Code:</p> <p>- Material for Export:</p>	<ul style="list-style-type: none"> <li>- Classified as a Dangerous Good according to the Australian Dangerous Goods Code, 6th Ed.</li> <li>- UN 1908</li> <li>- CHLORITE SOLUTION (CHLORINE DIOXIDE)</li> <li>- Class 8 Corrosive</li> <li>- PG II</li> <li>- HAZCHEM 2X</li> <li>- Dangerous product described by transport regulations GGVS/GGVE/RID/ADR/IMDG-Code/ICAO-TI</li> </ul>
<p><b>15. Regulatory Information</b></p> <p>- NOHSC</p> <p>- SUSDP</p> <p>- International Regulatory Information</p>	<p>T Toxic, N Dangerous for the Environment</p> <p>Not scheduled</p> <p>No details available</p>
<p><b>16. Other Information</b></p> <p>- Abbreviations and Acronyms</p> <p>- Revision Notes</p>	<p>This information is based on our present state of knowledge and is intended to describe our product with respect to possible safety demands. We imply with this however no guarantee of properties or description of qualities.</p> <p>NOHSC – National Occupational Health and Safety Commission SUSDP – Standard for the Uniform Scheduling of Drugs and Poisons</p> <p>Latest Version: TM001-01 / 2008.09.30 Additions: Initial version Previous Version: Initial version First Version: 2008.09.30</p>