

**Anthium™ Dioxide**

Version 3.0

Revision Date 02/11/2016

Ref. 130000000268

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	Anthium™ Dioxide
Product Use	:	Biocides, For industrial use only.
Restrictions on use	:	Do not use product for anything outside of the above specified uses
Manufacturer/Supplier	:	International Dioxide, Inc. 40 Whitecap Drive North Kingstown, RI 02852 United States of America
Product Information	:	1-800-477-6071/1-401-295-8800
Transport Emergency	:	CHEMTREC: +1-800-424-9300 (outside the U.S. +1-703-527-3887)
Other information	:	professional use

SECTION 2. HAZARDS IDENTIFICATION

Potential Health Effects	:	
Skin	:	May cause skin irritation.
Eyes	:	May irritate eyes.
Inhalation	:	Respiratory irritation
Ingestion	:	Gastrointestinal discomfort
Repeated exposure	:	
Sodium chlorite	:	Adverse effects from repeated ingestion may include: Gastrointestinal effects Abnormal decrease in number of red blood cells (anaemia) which could produce tiredness, rapid heartbeat, dizziness, pale skin, leg cramps, shortness of breath altered blood chemistry
Target Organs	:	

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Sodium chlorite : Blood

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Sodium chlorite	7758-19-2	5 - 10 %
Water	7732-18-5	90 - 95 %

SECTION 4. FIRST AID MEASURES

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Move to fresh air. If not breathing, give artificial respiration. Call a poison control center or doctor for treatment advice.
- Skin contact : Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water. Call a poison control center or doctor for treatment advice.
- Eye contact : Rinse immediately with plenty of water and seek medical advice.
- Ingestion : Call a poison control center or doctor for treatment advice. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
- Most important symptoms/effects, acute and delayed : No applicable data available.



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Protection of first-aiders : If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician : Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : The product itself does not burn., Use extinguishing measures that are appropriate to local circumstances and the surrounding environment., Foam, Sand, Dry powder, Water spray

Unsuitable extinguishing media : Carbon dioxide (CO2)

Specific hazards : Drying of this product on clothing or combustible materials may cause fire.

Special protective equipment for firefighters : Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment.

Further information : Evacuate personnel to safe areas. Evacuate personnel and keep upwind of fire. Keep containers and surroundings cool with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : Wear personal protective equipment. Avoid contact with the skin and the eyes.

Environmental precautions : Prevent material from entering sewers, waterways, or low areas. Do not allow to dry.



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- Spill Cleanup : Dilute with water. Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water.
- Accidental Release Measures : No applicable data available.

SECTION 7. HANDLING AND STORAGE

- Handling (Personnel) : Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday.
- Handling (Physical Aspects) : Avoid letting the product become dry.
- Dust explosion class : Not applicable
- Storage : Keep tightly closed in a dry, cool and well-ventilated place. Keep away from food, drink and animal feedingstuffs. Avoid heat, freezing and ultraviolet light. Do not allow to dry. Keep away from: Strong acids and oxidizing agents
- Storage period : No applicable data available.
- Storage temperature : No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering controls : Ensure adequate ventilation, especially in confined areas.
- Personal protective equipment
 - Respiratory protection : Where there is potential for airborne exposures in excess of applicable limits, wear approved respiratory protection with dust/mist cartridge.
 - Hand protection : Additional protection: Impervious gloves
 - Eye protection : Wear overall chemical splash goggles. Additionally wear a face shield where the possibility exists for face contact due to splashing, spraying or airborne contact with this material.

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Skin and body protection : Where there is potential for skin contact, have available and wear as appropriate, impervious gloves, apron, pants, jacket, hood and boots.

Protective measures : Avoid exposure - obtain special instructions before use. Wear suitable gloves and eye/face protection.

Exposure Guidelines
Exposure Limit Values

Contains no substances with occupational exposure limit values. Contains no substances with occupational exposure limit values.

This product does not contain any exposure limits that require disclosure according to OSHA Hazard Communication Standard 2012.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state : liquid
Form : liquid
Color : light yellow

Odor : odourless, slight chlorine

Odor threshold : No applicable data available.

pH : 9.0 - 9.2

Melting point/freezing point : Crystallization temperature
ca. -5 °C (23 °F)
Freezing point
ca. -10 °C (14 °F)

Boiling point/boiling range : Boiling point
ca. 105 °C (221 °F)

Flash point : does not flash

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Evaporation rate	: No applicable data available.
Flammability (solid, gas)	: No applicable data available.
Upper explosion limit	: No applicable data available.
Lower explosion limit	: No applicable data available.
Vapour Pressure	: No applicable data available.
Vapour density	: No applicable data available.
Specific gravity (Relative density)	: 1.065 - 1.095 at 20 °C (68 °F)
Water solubility	: completely soluble
Solubility(ies)	: No applicable data available.
Partition coefficient: n-octanol/water	: No applicable data available.
Auto-ignition temperature	: No applicable data available.
Decomposition temperature	: Stable under normal conditions. Decomposes on heating.
Viscosity, kinematic	: No applicable data available.
Viscosity, dynamic	: No applicable data available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Decomposes on heating.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Contact with acids, organic materials, reducing agents and oxidizing agents will release toxic gases of chlorine and/or chlorine dioxide.

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Conditions to avoid	:	Direct sources of heat.
Incompatible materials	:	Strong acids and oxidizing agents Organic materials, chlorinated compounds, Reducing agents
Hazardous decomposition products	:	Hazardous decomposition products: Chlorine , Chlorine dioxide...%

SECTION 11. TOXICOLOGICAL INFORMATION

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Inhalation 4 h LC50	:	> 6.53 mg/l , Rat
Dermal LD50	:	> 2,000 mg/kg , Rat
Oral LD50	:	1,075 mg/kg , Rat

Sodium chlorite

Skin irritation	:	Corrosive, Rabbit
Eye irritation	:	Corrosive, Rabbit
Skin sensitization	:	Does not cause skin sensitisation., Guinea pig Animal test did not cause sensitization by skin contact.
Repeated dose toxicity	:	Oral Rat - 1 yr Target Organs: Spleen The substance or mixture is classified as specific target organ toxicant, repeated exposure, Category 2. Gastrointestinal effects, Abnormal decrease in number of red blood cells, Abnormal decrease in red -blood -cell haemoglobin (hemoglobinemia) Oral Rat - 14 d altered hematology, altered urinalysis results

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	Oral Monkey - altered hematology, altered blood chemistry
Carcinogenicity	: Not classifiable as a human carcinogen. Animal testing did not show any carcinogenic effects.
Mutagenicity	: Tests on bacterial or mammalian cell cultures did not show mutagenic effects. Animal testing did not show any mutagenic effects.
Reproductive toxicity	: No toxicity to reproduction Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.
Teratogenicity	: Animal testing showed effects on embryo-fetal development at levels equal to or above those causing maternal toxicity.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION**Aquatic Toxicity****Sodium chlorite**

96 h LC50	: Cyprinodon variegatus (sheepshead minnow) 105 mg/l
96 h ErC50	: Algae 5.33 mg/l
96 h EbC50	: Algae 1.09 mg/l

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96 h NOEC : Algae 0.62 mg/l
48 h EC50 : Daphnia magna (Water flea) < 1.0 mg/l
96 h LC50 : Americamysis bahia (mysid shrimp) 0.65 mg/l

Environmental Fate

Sodium chlorite

Biodegradability : Readily biodegradable

Additional ecological information : No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods - Product : Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA (US) Status : On the inventory, or in compliance with the inventory

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SARA 313 Regulated Chemical(s)	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
NJ Right to Know Regulated Chemical(s)	: Substances on the New Jersey Workplace Hazardous Substance List present at a concentration of 1% or more (0.1% for substances identified as carcinogens, mutagens or teratogens): Sodium chlorite
EPA Reg. No.	: 9150-2 In the United States this product is regulated by the US Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read and follow all label directions. This product is excluded from listing requirements under EPA/TSCA.
California Prop. 65	: Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known Chemicals known to the State of California to cause cancer, birth defects or any other harm: none known

SECTION 16. OTHER INFORMATION

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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