

Material Safety Data Sheet



Anthium Dioxide®

Version 2.0

Revision Date 12/04/2009

Ref. 130000000268

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Anthium Dioxide®
MSDS Number : 130000000268
Product Use : Biocides
Manufacturer : International Dioxide, Inc., A DuPont Subsidiary, 40 Whitecap Drive, North Kingstown, RI 02852
Product Information : 1-800-441-7515 (outside the U.S. 1-302-774-1000)
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

Sodium chlorite : May irritate skin.

Eyes

Sodium chlorite : May irritate eyes.

Inhalation

Sodium chlorite : Respiratory irritation

Ingestion

Sodium chlorite : Gastrointestinal discomfort

Carcinogenicity

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 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

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.
Inhalation : Move to fresh air. If not breathing, give artificial respiration. Call a poison

Material Safety Data Sheet



Anthium Dioxide[®]

Version 2.0

Revision Date 12/04/2009

Ref. 13000000268

- control center or doctor for treatment 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.
- Notes to physician : Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5. FIRE-FIGHTING MEASURES

- Flammable Properties
- Flash point : does not flash
- Thermal decomposition : Stable under normal conditions., Decomposes on heating.
- Fire and Explosion Hazard : Drying of this product on clothing or combustible materials may cause fire.
- Suitable extinguishing media : Water
- Firefighting Instructions : Wear self-contained breathing apparatus (SCBA). Wear suitable protective equipment.

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) : Evacuate personnel to safe areas.
- Spill Cleanup : Dilute with water. Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water.
- Accidental Release Measures : Prevent material from entering sewers, waterways, or low areas. Do not allow to dry.

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.
- 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



Anthium Dioxide®

Version 2.0

Revision Date 12/04/2009

Ref. 130000000268

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.
 - 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 : None established.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Form : liquid
- Color : light yellow
- Odor : odourless, slight chlorine
- pH : 9.0 - 9.2
- Crystallization temperature : ca. -5 °C (23 °F)
- Freezing point : ca. -10 °C (14 °F)
- Boiling point : ca. 105 °C (221 °F)
- Specific Gravity : 1.065 - 1.095 at 20 °C (68 °F)
- Water solubility : completely soluble

SECTION 10. STABILITY AND REACTIVITY

- Stability : Stable at normal temperatures and storage conditions. Decomposes on heating.
- Incompatibility : Strong acids and oxidizing agents Organic materials chlorinated compounds Reducing agents
- Hazardous decomposition products : , Chlorine , Chlorine dioxide (solution)
- Hazardous reactions : Contact with acids, organic materials, reducing agents and oxidizing agents will release toxic gases of chlorine and/or chlorine dioxide.



Anthium Dioxide®

Version 2.0

Revision Date 12/04/2009

Ref. 130000000268

SECTION 11. TOXICOLOGICAL INFORMATION

Anthium Dioxide®	
Inhalation 4 h LC50	: > 6.53 mg/l , rat
Dermal LD50	: > 2,000 mg/kg , rat
Oral LD50	: 1,075 mg/kg , rat
Skin irritation	: irritating
Eye irritation	: Eye irritation
Sodium chlorite	
Repeated dose toxicity	: Oral, rat Abnormal decrease in number of red blood cells, Abnormal decrease in red -blood -cell haemoglobin (hemoglobinemia)
	: Oral, rat Organ weight changes, Liver
	: Oral, Monkey Thyroid effects
Carcinogenicity	: Animal testing did not show any carcinogenic effects.
Mutagenicity	: Did not cause genetic damage in cultured mammalian cells.
Reproductive toxicity	: Animal testing showed effects on reproduction at levels equal to or above those causing parental toxicity.
Teratogenicity	: Animal testing showed effects on embryo-foetal development at levels equal to or above those causing maternal toxicity.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic Toxicity	
Sodium chlorite	
96 h LC50	: Cyprinodon variegatus (sheepshead minnow) 75 mg/l
96 h EC50	: Desmodesmus subspicatus (green algae) 1.32 mg/l
72 h ErC50	: Algae 1.2 mg/l
48 h EC50	: Daphnia magna (Water flea) 0.0146 mg/l
Additional ecological information	: No data is available on the product itself.

Material Safety Data Sheet



Anthium Dioxide[®]

Version 2.0

Revision Date 12/04/2009

Ref. 130000000268

SECTION 13. DISPOSAL CONSIDERATIONS

- Waste Disposal : Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.
- Environmental Hazards : 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 regulated in transportation by DOT/IMO/IATA.

SECTION 15. REGULATORY INFORMATION

- TSCA Status : Listed.
- SARA 313 Regulated Chemical(s) : SARA 313: 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.
- 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
- 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

SECTION 16. OTHER INFORMATION

- MSDS preparation date : 12/04/2009
- Contact person : MSDS Coordinator, DuPont Chemical Solutions Enterprise, Wilmington, DE 19898, (800) 441-7515

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,



Anthium Dioxide[®]

Version 2.0

Revision Date 12/04/2009

Ref. 13000000268

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.

Significant change from previous version is denoted with a double bar.