



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont
Material Safety Data Sheet

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Anthium Dioxide(R)
IDI006 Revised 1-DEC-2006

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Tradenames and Synonyms

Oxychlorine Solution

Company Identification

MANUFACTURER/DISTRIBUTOR

International Dioxide, Inc.
A DuPont Subsidiary
40 Whitecap Drive
North Kingstown, RI 02852

PHONE NUMBERS

Product Information : 800-441-7515/Outside US: 302-774-1000
Transport Emergency : CHEMTREC: 800-424-9300/Outside US:
703-527-3887
Medical Emergency : 800-441-3637/Outside US: 302-774-1000

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
Oxychlorine Compounds		5
Inert Ingredients		95

HAZARDS IDENTIFICATION

Emergency Overview

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION:

Causes moderate eye irritation. Harmful if swallowed or absorbed through the skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling.

(HAZARDS IDENTIFICATION - Continued)

Potential Health Effects

SKIN CONTACT may cause irritation. Prolonged contact may cause dermatitis.

EYE CONTACT may cause irritation.

INGESTION may be harmful and may cause irritation of the gastrointestinal tract, nausea, vomiting and diarrhea.

NOTE: Upon contact with acids, organic materials, reducing or oxidizing agents or chlorine donors, this product will release CHLORINE DIOXIDE gas. Inhalation of chlorine dioxide can cause respiratory tract irritation, coughing, wheezing and burns of the mucous membranes. Inhalation of large amounts may lead to pulmonary edema and bronchitis. Prolonged or repeated inhalation of chlorine dioxide gas may cause chronic bronchitis or emphysema. Direct contact with chlorine dioxide causes eye and skin irritation and may cause burns. Chlorine dioxide is toxic by ingestion. Oxychlorine compounds have been shown to cause blood disorders in laboratory animals. Exposure to chlorine dioxide may aggravate existing medical conditions such as asthma, bronchitis or any other respiratory ailment.

Carcinogenicity Information

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

FIRST AID MEASURES

First Aid

If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If swallowed: Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

(FIRST AID MEASURES - Continued)

Notes to Physicians

Probable mucosal damage may contraindicate the use of gastric lavage.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point: None up to 90 deg. C (boiling point 93 deg. C)
Method: PMCC

Dry Sodium Chlorite is an oxidizing material. Increases flammability of combustible, organic or other readily oxidizable materials.

Contact with acids, organic materials, oxidizing agents, reducing agents or chlorine donors will produce chlorine dioxide gas and heat. The lower explosive limit (LEL) for chlorine dioxide is 10% in air. Flush area with large amounts of air to keep the chlorine dioxide concentration below 10%.

Sodium Chlorite has been shown, when allowed to dry, to ignite by heat or friction at concentrations of 5% or above.

This product is significantly below this concentration and has not been shown to enhance combustion or self-ignite when allowed to dry.

Extinguishing Media

Water.

Fire Fighting Instructions

Evacuate personnel to a safe area. Wear self-contained breathing apparatus (SCBA) and full protective equipment.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

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

(ACCIDENTAL RELEASE MEASURES - Continued)

Accidental Release Measures

Dike spill. Flush with water to dilute. Do not allow contact with rags, paper or other oxidizable materials. For large spills, evacuate area, contain liquid and transfer to closed plastic drums. Prevent contact with oxidizers and acids. Do not allow liquid solution to dry. Keep out of water supply. Flush area with water after liquid is removed.

HANDLING AND STORAGE

Handling (Personnel)

Do not breathe vapor or mist. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Wash clothing after use.

Handling (Physical Aspects)

Do not allow solution to evaporate to dryness. Protect from heat, freezing and ultraviolet light. Keep container closed.

Storage

Store in a cool, dry location away from incompatible materials.

Do not store with easily oxidizable materials, acids, oxidizers, reducers, and combustible material. Avoid heat or freezing conditions. Store upright and do not stack drums over two high on pallets or partially filled drums. Use of a drum pump is suggested. Keep drum tightly closed when not withdrawing liquid. In case of spills, dilute with large quantities of water. Avoid storing product under conditions in which it could evaporate to a crystalline salt. Store only in the original container and take care to prevent cross-contamination with other pesticides, fertilizers, food and feed.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use only with adequate ventilation.

(EXPOSURE CONTROLS/PERSONAL PROTECTION - Continued)

Personal Protective Equipment

EYE/FACE PROTECTION:

Wear safety glasses. Where splash potential exists, wear chemical splash goggles.

RESPIRATORS:

Wear NIOSH approved respiratory protection, as appropriate.

PROTECTIVE CLOTHING:

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

Exposure Guidelines

Exposure Limits

Anthium Dioxide(R)

PEL (OSHA) : None Established

TLV (ACGIH) : None Established

Exposure Guideline Comments

*Chlorine Dioxide: (produced by activation of Anthium Dioxide)

PEL (OSHA) : 0.1 ppm, 0.3 mg/m3, 8 Hr. TWA

TLV (ACGIH) : 0.1 ppm, 0.28 mg/m3, 8 Hr. TWA

STEL 0.3 ppm, 0.83 mg/m3

AEL (DuPont) : None Established

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point: 105 degrees C
 Vapor Pressure: Approximates Water
 Solubility in Water: 100%
 pH: 8.5-9.5
 Odor: Chlorine or Ozone-like
 Form: Solution
 Color: Clear Pale Yellow Green
 Specific Gravity: 1.065-1.095 (H2O = 1)

STABILITY AND REACTIVITY

Chemical Stability

Stable.

Incompatibility with Other Materials

Contact with acids, organic materials, oxidizing agents, reducing agents and chlorine donors will release chlorine dioxide.

Decomposition

Decomposes with heat.

Thermal decomposition will produce chlorine dioxide gas.

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Anthium Dioxide:

Inhalation LC50: >6.53 mg/L
Acute Dermal LD50: >2000 mg/kg in rats
Acute Oral LD50: 1075 mg/kg in rats
Primary Eye Irritant: Moderately irritating in rabbits.
Primary Dermal Irritant: Moderately irritating in rabbits.

Chlorine Dioxide:

Oral LD50: 292 mg/kg in rats

ECOLOGICAL INFORMATION

Ecotoxicological Information

ENVIRONMENTAL HAZARDS

This product is toxic to fish and aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State

(ECOLOGICAL INFORMATION - Continued)

Water Board or Regional Office of the EPA.

DISPOSAL CONSIDERATIONS

Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label directions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

TRANSPORTATION INFORMATION

Shipping Information

Not Regulated as a hazardous material by DOT, IMO, or IATA.

REGULATORY INFORMATION

U.S. Federal Regulations

TSCA Inventory Status : Listed.

TITLE III HAZARD CLASSIFICATIONS SECTIONS 311, 312

Acute : Yes
Chronic : No
Fire : No
Reactivity : No
Pressure : No

FIFRA Registration: EPA Registration No. 9150-2

Canadian Regulations

CLASS C Oxidizing Material

(REGULATORY INFORMATION - Continued)

CLASS D Division 2 Subdivision B - Toxic Material. Skin or Eye Irritant.

Country_specific Regulations

LISTED:

EINECS (Europe)
MITI (Japan)
AICS (Australia)

OTHER INFORMATION

NFPA, NPCA-HMIS

NPCA-HMIS Rating
Health : 2
Flammability : 1
Reactivity : 0

Personal Protection rating to be supplied by user depending on use conditions.

Additional Information

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Before using this product in the generation of chlorine dioxide for biological control in water treatment and water storage system applications, see product data.

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsible for MSDS : MSDS Coordinator
> : DuPont Chemical Solutions Enterprise
Address : Wilmington, DE 19898
Telephone : (800) 441-7515

Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS