SAFETY DATA SHEET

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

1. Identification

Product identifier	**Anthium™ C-RTU**
Other means of identification	Material Number: 57956483 EPA Registration Number: 9150-15
Recommended use	Biocide
Recommended restrictions	None known

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name	International Dioxcide, Inc.
Address	40 Whitecap Drive North Kingstown, RI 02852 United States of America
Telephone	Information #: (800) 477-6071
Website	https://idiclo2.com
E-mail	idiclo2@ercoworldwide.com
Emergency phone number	Canada & U.S.A.: (800) 424 9300 (CHEMTREC) International: (703) 527 3887
Supplier	Refer to Manufacturer

2. Hazard(s) Identification

Physical hazards	None
Health hazards	None
Environmental hazards	Not currently regulated by OSHA, refer to Section 12 for additional information.
OSHA defined hazards	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), the SDS contains valuable information critical to the safe handling and proper use of the product. The SDS should be retained and available for employees and other users of this product.
Label elements	None
Signal word	None
Hazard statement	No known significant effects or critical hazards.

Precautionary statement

Prevention	Not applicable
Response	Not applicable
Storage	Not applicable
Disposal	Not applicable

Hazard(s) not otherwise classified (HNOC) If Sodium Chlorite dries on some types of fire-retardant clothing it is known to cause an exothermic reaction. The reaction has been known to cause burns to skin. Nomex appears to be the only material not to experience this reaction.

Supplemental information Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink

3. Composition/Information on Ingredients

Chemical name	Common name and synonyms	CAS number	Conc. % By Weight
Sodium chlorite	None	7758-19-2	<1% w/w
Alcohols, C12-15, ethoxylated	None	68131-39-5	<1% w/w

Chemical name of impurities, stabilizing solvents and/or additives: None.

Any concentration shown as a range is to protect confidentiality or is due to batch variation.
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health and hence require reporting in this section

4. First-Aid Measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin Contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Ingestion Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed	No known significant effects or critical hazards.
Indication of immediate medical attention and special treatment needed	No known significant effects or critical hazards.
General information	Notes to physician: Treat symptomatically. No specific treatment.

5. Fire-Fighting Measures

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	In a fire or if heated, a pressure increase will occur, and the container may burst.
Special protective equipment and precautions for firefighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. If Sodium Chlorite dries on some types of fire-retardant clothing it is known to cause an exothermic reaction. The reaction has been known to cause burns to skin. Nomex appears to be the only material not to experience this reaction.
Firefighting equipment /instructions	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Specific methods	None known
General fire hazards	None known
Hazardous combustion products	None known

6. Accidental Release Measures

Personal precautions, protective equipment	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected

and emergency procedures	personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Methods and materials for containment and cleaning up	Stop leak if without risk. Move containers from spill area. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non- combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Prevent entry into sewers, water courses, basements or confined areas.
Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

7. Handling and Storage

Precautions for safe handling	Remove contaminated clothing and protective equipment before entering eating areas. Workers should wash hands and face before eating, drinking and smoking. Put on appropriate personal protection equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Empty containers or liners may retain some product residues.

8. Exposure Controls/Personal Protection

Occupational Exposure Limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation should be sufficient to control worker exposure to airborne contaminants

Individual protection measures, such as personal protective equipment

Eye/face protection	If contact with product is possible, wear safety glasses with side shields.
Skin protection	
Hand protection	Permeation resistant gloves.

Other	Permeation resistant clothing and foot protection. If Sodium Chlorite dries on some types of fire-retardant clothing it is known to cause an exothermic reaction. The reaction has been known to cause burns to skin. Nomex appears to be the only material not to experience this reaction.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Thermal Hazards	If Sodium Chlorite dries on some types of fire-retardant clothing it is known to cause an exothermic reaction. The reaction has been known to cause burns to skin. Nomex appears to be the only material not to experience this reaction.
General hygiene considerations	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. Physical and Chemical Properties

Appearance	
Physical state	Liquid
Form	Liquid
Color	Clear
Odor	Alcohol-like
Odor threshold	Not available
Molecular formula	Not available
Molecular weight	Not available
pH	10 to 11
Melting point/Freezing Point	Not available
Initial boiling point and boiling range	93 °C (1013 hPa)
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not available
Flammability limit – upper (%)	Not available
Explosive limit – lower (%)	Not available
Explosive limit – upper (%)	Not available
Vapor pressure	Not available
Vapor density	Not available
Relative density	Not available
Solubility (ies)	
Solubility (water)	Not available

Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information	
Density	1 g/cm³
Flammability	Not available
Specific gravity	Not available
Surface tension	Not available

10. Stability and Reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability The product is stable.

Possibility of hazardous reactions Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to Avoid No specific data.

Incompatible materials No specific data.

Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological Information

Information on likely routes of exposure

Inhalation	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Delayed and immediate effects and chronic effects from short-term and long-term exposure

Effects of short-term (acute) exposure No known significant effects or critical hazards.

Effects of long-term (chronic) exposure No known significant effects or critical hazards.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Sodium Chlorite		
Acute		
LD50 Oral	Rat – Male, Female	284 mg/kg (Test: OECD 401 Acute Oral Toxicity)

LD50 Dermal	Rabbit – Male, Female	134 mg/kg (Test: OPP 81-2 Acute Dermal Toxicity)
LD50 Inhalation Dusts and Mists	Rat	230 mg/m³ over 4 hours

Components	Species	Test Results
Alcohols, C12-15, ethoxylated		
Acute		
LD50 Oral	Rat – Male, Female	>5000 mg/kg (Test: OECD 401 Acute Oral Toxicity)
LD50 Dermal	Rat – Male, Female	>2000 mg/kg (Test: 402 Acute Dermal Toxicity)
LD50 Inhalation Vapor	Rat – Male, Female	>1.6 mg/l over 4 hours *Test results on an analogous product (Test: OECD 403 Acute Inhalation Toxicity)

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation — Sodium chlorite: Corrosive, tested on rabbits

Serious eye damage/eye irritation — Sodium chlorite: Risk of serious damage to eyes, tested on rabbit eyes

Respiratory or skin sensitization

Respiratory sensitization — Not sensitizing

Skin sensitizer — Not sensitizing

Germ cell mutagenicity — No known significant effects or critical hazards

Carcinogenicity — This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity — Sodium Chlorite (CAS 7758-19-2) and Alcohols, C12-15, ethoxylated (CAS 68131-39-5) not classifiable as to carcinogenic to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Reproductive toxicity — No known significant effects or critical hazards

Specific target organ toxicity - single exposure	No known significant effects or critical hazards
Specific target organ toxicity - repeated exposure	Sodium chlorite: Specific Target Organ Toxicity (STOT), Repeated Exposure: blood, kidneys, liver, spleen.
Aspiration toxicity	No known significant effects or critical hazards
Chronic effects	Not available

12.Ecological Information

Ecotoxicity

Product		Species	Test	Test Results
Sodium chlorite				
	Acute EC50	Algae - Scenedesmus Capricornutum	-	1 mg/l Fresh water over 96 hours
	Acute EC50	Crustaceans - Mysidopsis bahia	-	0.65 mg/l Marine water over 96 hours
	Acute EC50	Daphnia - Daphnia magna	OECD 202 Daphnia sp. Acute Immobilization Test	<1 mg/l Fresh water over 48 hours
	Acute LC50	Fish - Oncorhynchus Mykiss	-	106 mg/l Fresh water over 96 hours
	Chronic NOEC	Algae - Scenedesmus Capricornutum	-	0.62 mg/l Fresh water over 96 hours
Alcohols, C12-15, ethoxylated				
	Acute EC50	Algae - Pseudokirchneriella Subcapitata	-	0.75 mg/l (growth rate) over 72 hours
	Acute EC50	Daphnia - Daphnia Magna	-	0.14 mg/l Mortality over 48 hours
	Acute LC50	Fish - Oncorhynchus Mykiss	-	1.3 to 1.7 mg/l over 96 hours
	Chronic EC20	Daphnia - Daphnia Magna	QSAR WoE	0.514 mg/l over 21 days

Chronic EC20	Fish	QSAR WoE	0.9 mg/l Mortality over 30 days

Persistence and degradability Not available

Bioaccumulative potential Sodium chlorite: $LogP_{ow}$ <-2.7, potential: low

Mobility in soil Not available

Other adverse effects No known significant effects or critical hazards.

Disposal Considerations

Disposal instructions The generation of waste should be avoided or minimized wherever possible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Waste disposal should be in accordance with existing federal state, provincial and or local environmental controls laws.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

Waste from residues / unused products Not available

Contaminated packaging Not available

13.Transport Information

DOT Not regulated

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not Available.

General information RQ: 0 lbs.

14.Regulatory Information

SARA 311/312 None

SARA Title III Section 302 Extremely Hazardous Substances None

SARA Title III Section 313 Toxic Chemicals	None
US EPA CERCLA Hazardous Subtances (40 CFR 302.4)	None

State Regulations
The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections on the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state

Ingredient Name	CAS Number	State Code	Concentration (%)
Water	7732-18-5	-	≥90

Massachusetts Substances: MA - S
Massachusetts Extraordinary Hazardous Substances: MA - Extra HS New Jersey Hazardous Substances: NJ - HS
Pennsylvania RTK Hazardous Substances: PA - RTK HS Pennsylvania Special Hazardous Substances: PA - Special HS

California Prop. 65
To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

U.S. Toxic Substances Control Act	This product is excluded from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

FIFRA
EPA Registration Number 9150-15
This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

Signal word	CAUTION
Hazard statements	Causes moderate eye irritation

15.Other Information

Issue date	4/1/2022
Revision #	6
Revision Indicator	Added FR clothing precaution.

List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Services
CERCLA: Comprehensive Environmental Response, Compensation and Liability Act of 1980
CFR: Code of Federal Regulations
DOT: Department of Transportation
EPA: Environmental Protection Agency
EPCRA: Emergency Planning and Community Right-to-Know Act
ERG: Emergency Response Guidebook
HSDB® - Hazardous Substances Data Bank
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IBC: Intermediate Bulk Container
IDLH: immediately dangerous to life or health
IMDG: International Maritime Dangerous Goods
LC: Lethal Concentration
LD: Lethal Dose
NIOSH: National Institute of Occupational Safety and Health
NOEC: No observable effect concentration
NTP: National Toxicology Program
OECD: Organization for Economic Cooperation and Development
OEL: National occupational exposure limits
OSHA: Occupational Safety and Health Administration
PEL: Permissible exposure limit
RCRA: Resource Conservation and Recovery Act
RQ: Reportable Quantity
RTECS: Registry of Toxic Effects of Chemical Substances
SAR: supplied-air respirator
SCBA: self-contained breathing apparatus
SDS: Safety Data Sheet
STEL: Short Term Exposure Limit
TWA: Time Weighted Average
UN: United Nations

References

None.

Disclaimer

Information presented in this SDS is furnished in accordance with OSHA's Hazard Communication Standard (HCS) 2012.

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