

SAFETY DATA SHEET

Section 1. Identification

Product identifier : Anthium™ C-RTU
Material Number : 57956483
EPA Registration Number: : 9150-15
Identified uses : Biocide

Supplier/Manufacturer : International Dioxide, Inc.
 40 Whitecap Drive
 North Kingstown, RI 02852

For Information: (800) 477-6071
 International: +1 (401) 295-8800

In case of emergency : CHEMTREC (800) 424 9300
 International (703) 527 3887

Section 2. Hazards identification

HAZCOM Standard Status : 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.

Physical state : Liquid.
Color : clear
Classification of the substance or mixture : Not classified.

Signal word : No signal word.
Hazard statements : No known significant effects or critical hazards.
Hazard Not Otherwise Classified (HNOC) : None known.
Precautionary statements

Prevention : Not applicable.
Response : Not applicable.
Storage : Not applicable.
Disposal : Not applicable.
Supplemental label elements : Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Sodium chlorite	<1	7758-19-2
Alcohols, C12-15, ethoxylated	<1	68131-39-5

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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of first aid measures

- 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.
- 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.
- 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.

Potential acute health effects

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

Over-exposure signs/symptoms

- Eye contact** : No specific data.
- Inhalation** : No specific data.
- Skin contact** : No specific data.
- Ingestion** : No specific data.

Potential chronic health effects

No known significant effects or critical hazards.

- Notes to physician** : Treat symptomatically. No specific treatment.
- Protection of first-aiders** : No special measures required.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- 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.
- Hazardous thermal decomposition products** : No specific data.

- Special protective actions for fire-fighters** : 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.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

- Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- 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).
- 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.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : 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** : 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.

Section 8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
Sodium chlorite	None
Alcohols, C12-15, ethoxylated	None

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal protection

- Hygiene measures** : 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.
- 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.
- Skin protection** : Permeation resistant clothing and foot protection. Permeation resistant gloves.
- Eye/face protection** : If contact with product is possible, wear safety glasses with side shields.
- Medical Surveillance** : Not available.

Section 9. Physical and chemical properties

Physical state	: Liquid.
Color	: clear
Odor	: Alcohol-like.
Odor threshold	: Not available.
pH	: 10 to 11
Boiling point	: 93 °C (1013 hPa)
Melting point	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Explosion limits	: Not available.
Vapor pressure	: Not available.
Density	: 1 g/cm ³
Specific gravity (Relative density)	: Not available.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Vapor density	: Not available.
Viscosity	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.

Section 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.

Section 11. Toxicological information

Information on the likely routes of exposure : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

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

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.

Potential chronic health effects

Short term exposure

Section 11. Toxicological information

Potential immediate effects : Not available.

Long term exposure

Potential delayed effects : Not available.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure	Test
Sodium chlorite	LD50 Oral	Rat - Male, Female	284 mg/kg	-	OECD 401 Acute Oral Toxicity
Alcohols, C12-15, ethoxylated	LD50 Oral	Rat - Male, Female	>5000 mg/kg	-	OECD 401 Acute Oral Toxicity
Sodium chlorite	LD50 Dermal	Rabbit - Male, Female	134 mg/kg	-	OPP 81-2 Acute Dermal Toxicity
Alcohols, C12-15, ethoxylated	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-	402 Acute Dermal Toxicity
Sodium chlorite	LC50 Inhalation Dusts and mists	Rat	230 mg/m ³	4 hours	-
Alcohols, C12-15, ethoxylated	LC50 Inhalation Vapor	Rat - Male, Female	>1.6 mg/l	4 hours *Test results on an analogous product	OECD 403 Acute Inhalation Toxicity

Irritation/Corrosion

Conclusion/Summary

Skin : Sodium chlorite:Corrosive.: tested on rabbits

Eyes : Sodium chlorite:Risk of serious damage to eyes.: tested on rabbit eyes

Sensitization

Product/ingredient name	Route of exposure	Species	Result
Sodium chlorite	skin	Guinea pig	Not sensitizing

Carcinogenicity

Product/ingredient name	CAS #	IARC	NTP	OSHA
Sodium chlorite	7758-19-2	Not classified.	Not classified.	Not classified.
Alcohols, C12-15, ethoxylated	68131-39-5	Not classified.	Not classified.	Not classified.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Sodium chlorite	Category 2	Not determined	spleen

Section 12. Ecological information

Toxicity

Product/ingredient name	Test	Result	Species	Exposure
Sodium chlorite	-	Acute EC50 1 mg/l Fresh water	Algae - Scenedesmus capricornutum	96 hours
	-	Acute EC50 0.65 mg/l Marine water	Crustaceans - Mysidopsis bahia	96 hours
	OECD 202 <i>Daphnia</i> sp. Acute Immobilization Test	Acute EC50 <1 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	-	Acute LC50 106 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	-	Chronic NOEC 0.62 mg/l Fresh water	Algae - Scenedesmus capricornutum	96 hours
Alcohols, C12-15, ethoxylated	-	Acute EC50 0.75 mg/l (growth rate)	Algae - Pseudokirchneriella subcapitata	72 hours
	-	Acute EC50 0.14 mg/l Mortality	Daphnia - Daphnia magna	48 hours
	-	Acute LC50 1.3 to 1.7 mg/l	Fish - Oncorhynchus mykiss	96 hours
	QSAR WoE	Chronic EC20 0.514 mg/l	Daphnia - Daphnia magna	21 days
	QSAR WoE	Chronic EC20 0.9 mg/l Mortality	Fish	30 days

Conclusion/Summary : Not available.

Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Alcohols, C12-15, ethoxylated	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Sodium chlorite	<-2.7	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : 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.

RCRA classification : : 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)

Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	-	-	-	-		Not regulated.
IMDG Class	-	-	-	-		Not regulated.
IATA-DGR Class	-	-	-	-		Not regulated.

PG* : Packing group

RQ : 0 lbs

Section 15. Regulatory information

SARA 311/312 : None

SARA Title III Section 302 : None

Extremely Hazardous Substances

SARA Title III Section 313 : None

Toxic Chemicals

US EPA CERCLA : None

Hazardous Substances (40 CFR 302.4)

[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.

<u>Ingredient name</u>	<u>CAS number</u>	<u>State Code</u>	<u>Concentration (%)</u>
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.

Section 16. Other information

Hazardous Material Information System	:	Health	0
		Flammability	0
		Physical hazards	0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme
*=Chronic

The customer is responsible for determining the PPE code for this material. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

National Fire Protection Association (U.S.A.) :



0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Our method of hazard communication is comprised of Product Labels and Safety Data Sheets. HMIS and NFPA ratings are provided as a customer service.

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Date of issue : 01-18-2018

Date of previous issue : 09-18-2017

Version : 3

Product Safety and Regulatory Affairs

▣ Indicates information that has changed from previously issued version.

Notice to reader

This information is furnished without warranty, express or implied. This information is believed to be accurate to the best knowledge of International Dioxide Inc.. The information in this SDS relates only to the specific material designated herein. International Dioxide Inc. assumes no legal responsibility for use of or reliance upon the information in this SDS.