


## 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

<b>Product identifier</b>	<b>Anthium™ AGP</b>
<b>Other means of identification</b>	Material Number: 57956476 EPA Registration Number: 9150-12
<b>Recommended use</b>	Biocide
<b>Recommended restrictions</b>	None known
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Manufacturer</b>	
<b>Company name</b>	International Dioxide, Inc.
<b>Address</b>	40 Whitecap Drive North Kingstown, RI 02852 United States of America
<b>Telephone</b>	Information #: (800) 477-6071
<b>Website</b>	<a href="https://idiclo2.com">https://idiclo2.com</a>
<b>E-mail</b>	idiclo2@ercoworldwide.com
<b>Emergency phone number</b>	Canada & U.S.A.: (800) 424 9300 (CHEMTREC) International: (703) 527 3887
<b>Supplier</b>	Refer to Manufacturer

### 2. Hazard(s) Identification

<b>Physical hazards</b>	None	
<b>Health hazards</b>	Acute toxicity, oral	Category 4
	Skin irritation	Category 2
	Eye irritation	Category 2B
	Specific target organ toxicity, repeated exposure (blood, kidneys, liver, spleen)	Category 2
<b>Environmental hazards</b>	Not currently regulated by OSHA, refer to Section 12 for additional information.	
<b>OSHA defined hazards</b>	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).	
<b>Label elements</b>		
<b>Signal word</b>	Warning	

<b>Hazard statement</b>	Harmful if swallowed. Causes serious eye irritation. Causes skin irritation. May cause damage to organs through prolonged or repeated exposure (blood, kidneys, liver, spleen).
<b>Precautionary statement</b>	
<b>Prevention</b>	Wear protective gloves and eye/face protection. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
<b>Response</b>	<b>IF SWALLOWED:</b> Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. <b>IF ON SKIN:</b> Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. <b>IF IN EYES:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. <b>IF exposed or concerned:</b> Call a POISON CENTER or doctor.
<b>Storage</b>	Not applicable.
<b>Disposal</b>	Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	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.
<b>Supplemental information</b>	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	≤10 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

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If not breathing, if breathing is irregular or respiratory arrest occurs, provide artificial respiration, or oxygen by a trained professional, using a pocket type respirator.
<b>Skin Contact</b>	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. In case of contact, flush skin with plenty of water for at least 20 minutes.
<b>Eye Contact</b>	Check for and remove any contact lenses. Get medical attention. In case of contact, flush eyes with plenty of water for at least 20 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated.
<b>Ingestion</b>	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. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Most important symptoms/effects, acute and delayed</b>	Causes serious eye irritation. Adverse symptoms may include watering, redness, reddening, tearing, stinging, and swelling. Causes skin irritation with symptoms of reddening, itching, and swelling. Harmful if swallowed. Irritating to mouth, throat and stomach. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. May cause damage to organs through prolonged or repeated exposure.
<b>Indication of immediate medical attention and special treatment needed</b>	Not available.
<b>General information</b>	Treat symptomatically. No specific treatment.

#### 5. Fire-Fighting Measures

<b>Suitable extinguishing media</b>	Use an extinguishing agent suitable for the surrounding fire. In case of fire, use water spray (fog), foam or dry chemical.
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<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Special protective equipment and precautions for firefighters</b>	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.
<b>Firefighting equipment /instructions</b>	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.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	May intensify fire; oxidizer when dry.
<b>Hazardous combustion products</b>	Decomposition products may include the following materials: halogenated compounds, metal oxide/oxides.

## 6. Accidental Release Measures

<b>Personal precautions, protective equipment and emergency procedures</b>	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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</b>	Stop leak if without risk. Move containers from spill area. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product. 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**

Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

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 retain product residue and can be hazardous. Do not reuse container.

## 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**

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Chemical splash goggles.

**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. A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.

**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**    Light yellow

**Odor**    Chlorine [Slight]

**Odor threshold**                            Not available

**Molecular formula**                        Not available

**Molecular weight**                         Not available

**pH**    9 to 9.2

**Melting point/Freezing Point**            Not available

**Initial boiling point and boiling range**    105 °C (1013 hPa)

**Flash point**                                    Closed cup: >100°C (>212°F)

**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**                                19.87 hPa (20°C)

**Vapor density**                                Not available

**Relative density**                              Not available

### Solubility (ies)

**Solubility (water)**                            Easily soluble in the following materials: cold water

**Partition coefficient (n-octanol/water)**    Not available

**Auto-ignition temperature**                Not available

**Decomposition temperature**                Not available

<b>Viscosity</b>	Dynamic: 3.26 mPa·s
<b>Other information</b>	
Density	1.065 to 1.095 g/cm <sup>3</sup>
Flammability	Not available
Specific gravity	Not available
Surface tension	Not available

## 10. Stability and Reactivity

<b>Reactivity</b>	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	The product is stable.
<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>Conditions to Avoid</b>	No specific data.
<b>Incompatible materials</b>	No specific data.
<b>Hazardous decomposition products</b>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological Information

### Information on likely routes of exposure

<b>Inhalation</b>	No known significant effects or critical hazards.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Harmful if swallowed. Irritating to mouth, throat and stomach.

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

**Effects of short-term (acute) exposure** Causes serious eye irritation. Adverse symptoms may include watering, redness, reddening, tearing, stinging, and swelling. Causes skin irritation with symptoms of reddening, itching, and swelling. Harmful if swallowed. Irritating to mouth, throat and stomach. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea.

**Effects of long-term (chronic) exposure** May cause damage to organs through prolonged or repeated exposure.

### Information on toxicological effects

#### Acute toxicity

Product	Species	Test Results
Anthium™ AGP		

<b>Acute</b>			
LD50 Oral	Rat		1075 mg/kg (Test results for a product at higher concentration)
LD50 Dermal	Rat		>2000 mg/kg (Test results for a product at higher concentration)
LD50 Inhalation (dusts and mists)	Rat		>6.53 mg/l over a 4-hour exposure (Test results for a product at higher concentration)

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

<b>Skin corrosion/irritation</b>	Moderate irritant (Test results for a product at higher concentration)
<b>Serious eye damage/eye irritation</b>	Mild irritant (Test results for a product at higher concentration)
<b>Respiratory or skin sensitization</b>	
<b>Respiratory sensitization</b>	Not sensitizing.
<b>Skin sensitizer</b>	Not sensitizing.
<b>Germ cell mutagenicity</b>	Not mutagenic in a standard battery of genetic toxicological tests. Did not show carcinogenic or mutagenic effects in animal experiments.
<b>Carcinogenicity</b>	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	Sodium Chlorite (CAS 7758-19-2) Not classifiable as to carcinogenicity to humans.
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>	Not listed.
<b>Reproductive toxicity</b>	Not classified as a reproductive toxin.
<b>Specific target organ toxicity - single exposure</b>	Not classified as a specific target organ toxicity -single exposure.
<b>Specific target organ toxicity - repeated exposure</b>	Specific Target Organ Toxicity (STOT), Repeated Exposure: blood, kidneys, liver, spleen.
<b>Aspiration toxicity</b>	Not expected to be an aspiration hazard.
<b>Chronic effects</b>	Chronic skin contact with low concentrations may cause dermatitis. Prolonged or repeated overexposure may cause blood, liver, spleen and kidney effects.



## 12. Ecological Information

### Ecotoxicity

Product	Species		Test Results
Sodium Chlorite (CAS 7758-19-2)			
<b>Aquatic</b>			
Acute			
Algae	EC <sub>50</sub>	Green algae ( <i>Selenastrum capricornutum</i> )	1.2 mg/l
Crustacea	EC <sub>50</sub>	Water flea ( <i>Daphnia</i> )	0.025 mg/l
Fish	LC <sub>50</sub>	Sheepshead minnow ( <i>Cyprinodon variegatus</i> )	110 mg/l
Chronic			
Algae	EC <sub>50</sub>	Green algae ( <i>Selenastrum capricornutum</i> )	1 mg/l

**Persistence and degradability** Biodegradation is not applicable to inorganic substances.

**Bioaccumulative potential** The product itself has not been tested

**Mobility in soil** In soil, will degrade to sodium chloride but may form chlorine dioxide in contact with acidic soils. Chlorate is an intermediate product of decomposition; it will slowly degrade to chloride.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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**

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. 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.

## 15. Regulatory Information

**SARA 311/312** Immediate (acute) health hazard

**SARA Title III Section 302 Extremely  
Hazardous Substances** None

**SARA Title III Section 313 Toxic  
Chemicals** None

**US EPA CERCLA  
Hazardous Substances (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.

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>State Code</u>	<u>Concentration (%)</u>
Sodium chlorite	7758-19-2	MA - S, NJ - HS, PA - RTK HS	≤10
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.

**EPA Registration Number**

9150-12

Signal word: CAUTION

Hazard statements: Causes moderate eye irritation.

Harmful if swallowed or absorbed through skin.

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.

**16.Other Information**

**Issue date** 3/31/2022

**Revision #** 6

**Revision Indicator** Clarified precautionary statements, 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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