MOMS – Mold Odor Mildew Smoke Mold/Mildew Odor Control Ready to Use Solution

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58/ Monday, March 26, 2012 / Rules and Regulation And According to the Hazardous Products Regulation (February 11, 2015)

Revision Date: 12/15/2017 Date of Issue: 01/05/2016 Version: 2.0

SECTION 1 IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: MOMS- Mold Odor Mildew Smoke Mold/Mildew Odor Control Ready to Use Solution

Product Code: 1020XX, 1021XX, 1030XX

Intended Use of the Product

Disinfectant/Sanitizer/Tuberculocide/Virucide/Fungicide/Algaecide/Slimicide/Deodorizer

Name, Address, and Telephone of the Responsible Party

Company

Listening Systems, Inc. / dba OdorXit
3729 Riva Ridge Drive
Hamilton, OH 45011
877-636-7948
www.odorxit.com

Technical Phone (513) 895-1000

Emergency Phone (513)-266-4008 **Fax** (513)868-8886

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US/CA Classification

Not classified

Label Elements

GHS-US/CA Labeling

No labeling applicable

Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions. Under normal conditions of use, when fully reacted and in solution, the solution is not considered hazardous. However, if the MOMS product is altered, or directions for use are not properly followed, the solution may evolve chlorine dioxide gas. At high concentrations chlorine dioxide gas can be explosive, and may be fatal if inhaled. If chlorine dioxide concentrations in solution reach >= .3% w/w this product may be irritating to the eyes, skin, and respiratory tract. At concentrations of 1-5% it will cause skin irritation and eye damage, and at concentrations > 5% it will cause skin burns.

Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% *
Chlorine dioxide	(CAS-No.) 10049-04-4	0.000025 - 0.01

*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Symptoms may be delayed. If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures. Contains an oxidizing material which may accelerate fire.

Explosion Hazard: Product is not explosive but may evolve explosive chlorine dioxide gas when pressurized or heated.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition. Remove containers from fire area if this can be done without risk.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Chlorine oxides. Chlorine gas.

Other Information: Risk of explosion if heated under confinement.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid prolonged contact with eyes, skin and clothing. Avoid breathing (vapor, mist, spray).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection. See Section 13, Disposal Considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing vapors, mist, and spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Reducing agents. Organic materials.

Specific End Use(s)

Disinfectant/Sanitizer/Tuberculocide/Virucide/Fungicide/Algaecide/Slimicide/Deodorizer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Chlorine dioxide (10049-04-4)		
Mexico	OEL TWA (mg/m^3)	0.3 mg/m^3
Mexico	OEL TWA (ppm)	0.1 ppm
Mexico	OEL STEL (mg/m^3)	0.9 mg/m^3
Mexico	OEL STEL (ppm)	0.3 ppm
USA ACGIH	ACGIH TWA (ppm)	0.1 ppm
USA ACGIH	ACGIH STEL (ppm)	0.3 ppm
USA OSHA	OSHA PEL (TWA) (mg/m^3)	0.3 mg/m^3
USA OSHA	OSHA PEL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m^3)	0.3 mg/m^3
USA NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m^3)	0.9 mg/m^3
USA NIOSH	NIOSH REL (STEL) (ppm)	0.3 ppm
USA IDLH	US IDLH (ppm)	5 ppm

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental Exposure Controls: Avoid release to the environment.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Liquid
Appearance	:	Not available
Odor	:	Chlorine
Odor Threshold	:	Not available
pH	:	Not available

Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20°C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Not available
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Reducing agents. Organic materials.

Hazardous Decomposition Products: None expected under normal conditions of use. Thermal decomposition generates: Chlorine dioxide. Chlorine gas. Oxygen.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified

Acute Toxicity (Dermal): Not classified

Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:	
Chlorine dioxide (10049-04-4)	
LD50 Oral Rat	93.86 mg/kg (0.2% gas in water)
LC50 Inhalation Rat	32 ppm/4h

SECTION 12: ECOLOGICAL INFORMATION

This section is not required according to the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations SOR/2015-17. The information commonly reported under other competent authorities in this section may require separate reporting. Contact the manufacturer for more information.

SECTION 13: DISPOSAL CONSIDERATIONS

This section is not required according to the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations SOR/2015-17. The information commonly reported under other competent authorities in this section may require separate reporting. Contact the manufacturer for more information.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with DOT, IMDG, IATA, TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

This section is not required according to the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations SOR/2015-17. The information commonly reported under other competent authorities in this section may require separate reporting. Contact the manufacturer for more information.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 12/15/2017

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US, Mex)

MOMS – Mold Odor Mildew Smoke - Unreacted Pouch

Safety Data Sheet

According to Federal Register / Vol. 77,No. 58/ Monday, March 26, 2012 / Rules and Regulation And According to the Hazardous Products Regulation (February 11, 2015)

Revision Date: 12/7/2017 Date of Issue: 10/07/2015 Supercedes Date: 02/08/2016 Version: 3.0

SECTION 1 IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: MOMS- Mold Odor Mildew Smoke Mold/Mildew Odor Control Unreacted Pouch

Product Code: 1020XX, 1021XX, 1220XX, 1030XX

Intended Use of the Product

Disinfectant/Sanitizer/Tuberculocide/Virucide/Fungicide/Algaecide/Slimicide/Deodorizer

Name, Address, and Telephone of the Responsible Party

Company

Listening Systems, Inc. / dba OdorXit

3729 Riva Ridge Drive
Hamilton, OH 45011

877-636-7948

www.odorxit.com

Technical Phone (513) 895-1000

Emergency Phone (513)-266-4008 **Fax** (513)868-8886

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US/CA Classification

Acute Toxicity (Oral) Category 4	H302
Acute Toxicity (Dermal) Category 3	H311
Acute Toxicity (Inhalation: Dust, Mist) Category 3	H331
Skin Corrosion/Irritation Category 1B	H314
Serious Eye Damage/Eye Irritation Category 1	H318
Specific Target Organ Toxicity (Repeated Exposure) Category 2	H373

Combustible Dust

According to test O.1 Test for Oxidizing Solids from the *UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria*, this product did not meet the definition of an oxidizing solid.

Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA) :

GHS05 GHS06 GHS08

Signal Word (GHS-US/CA) : Danger

Hazard Statements (GHS-US/CA) : May form combustible dust concentrations in air.

H302 - Harmful if swallowed.
H311+H331 - Toxic in contact with skin or if inhaled.
H314 - Causes severe skin burns and eye damage.
H318 - Causes serious eye damage.
H373 - May cause damage to organs (spleen) through prolonged or repeated exposure.

Precautionary Statements (GHS-US/CA) : P260 - Do not breathe dust, fume, mist, spray, vapors.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a POISON CENTER or doctor.
P311 - Call a POISON CENTER or doctor.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see section 4 on this SDS).
P330 - Rinse mouth.
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Supplemental Information : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Prevent dust accumulation (to minimize explosion hazard). Avoid generating dust.

Other Hazards

Hazardous to the aquatic environment - Acute Hazard Category 1 H400
Hazardous to the aquatic environment - Chronic Hazard Category 3 H412
H400 - Very toxic to aquatic life.
H412 - Harmful to aquatic life with long lasting effects.
P273 - Avoid release to the environment.


GHS09

Note: *This product, in contact with air or moisture, evolves chlorine dioxide gas. The product is designed to generate chlorine dioxide solution when the pouch is placed in specified amount of water. The product design limits both the amount of gas generated and the rate of release. High amount of chlorine dioxide gas is fatal if inhaled and causes severe skin burns and eye damage.*

Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% *
Citric acid	(CAS-No.) 77-92-9	69.5
Sodium chlorite	(CAS-No.) 7758-19-2	30.5
Chlorine dioxide	(CAS-No.) 10049-04-4	

Note: ***This product, in contact with air or moisture, evolves chlorine dioxide gas. The product is designed to generate chlorine dioxide solution when the pouch is placed in specified amount of water. The product design limits both the amount of gas generated and the rate of release. In the event of an emergency or if the pouch is accidently wetted, the composition for the reacted chlorine dioxide is below. Please see the attached "MOMS Ready to Use Solution" SDS for full hazards of the reacted pouch solution.***

Name	Product Identifier	% *
Chlorine dioxide	(CAS-No.) 10049-04-4	100

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
Inhalation: First, take proper precautions to ensure your own safety before attempting rescue (e.g. wear appropriate respiratory protective equipment, use the buddy system), then remove the exposed person to fresh air. Keep at rest in a position comfortable for breathing. Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a POISON CENTER or doctor/physician.
Skin Contact: Get immediate medical advice/attention. Remove contaminated clothing. Immediately flush skin with plenty of water for at least 30 minutes. Immediately call a POISON CENTER or doctor. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Harmful if swallowed. Toxic in contact with skin. Toxic if inhaled. Causes severe skin burns and eye damage. Causes serious eye damage. May cause damage to organs (spleen) through prolonged or repeated exposure.

Inhalation: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death. Dust may be harmful or cause irritation. May be corrosive to the respiratory tract.

Skin Contact: This material is toxic in small amounts through skin contact, and can cause adverse health effects or death. This material may be absorbed through the skin and eyes. Causes severe irritation which will progress to chemical burns.

Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva.

Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia.

Chronic Symptoms: May cause damage to organs (spleen) through prolonged or repeated exposure.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand. Causes methemoglobinemia – emergency response should treat appropriately, such as by intravenous administration of methylene blue.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible Dust.

Explosion Hazard: Dust explosion hazard in air.

Reactivity: Adding an acid to a base or base to an acid may cause a violent reaction. May cause an explosion through a vigorous reaction of polymerization if contaminated with incompatible materials. Violent exothermic reaction and development of heat with reducing materials. Potentially explosive reaction with combustible materials. Sodium chlorite reacts with acids to form spontaneously explosive chlorine dioxide gas (ClO_2). Ammonia with chlorites produces ammonium chlorite, which is a shock-sensitive compound. Finely divided metallic or organic substances, if mixed with chlorites, are highly flammable and may be ignited on friction. A mixture of organic matter and sodium chlorite can be extremely sensitive to heat, impact, or friction. Sodium chlorite reacts very violently with organic materials containing divalent sulfur or with free sulfur (may ignite).

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Remove containers from fire area if this can be done without risk. Do not breathe fumes from fires or vapors from decomposition. Avoid raising dust.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Sodium oxides. Chlorine. Chlorine oxides. Hydrogen chloride. Chlorine gas. Sulfur oxides. Sulfur compounds. Oxygen. Corrosive vapors.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses. Risk of dust explosion.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe dust. Avoid generating dust. Remove ignition sources. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Do not allow contact with incompatible materials (see section 10).

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions. Avoid generation of dust during clean-up of spills. Ventilate area.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize spilled solid. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use only non-sparking tools. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: May release corrosive vapors. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not get in eyes, on skin, or on clothing. Do not breathe dust. Use only outdoors or in a well-ventilated area. Keep away from heat, sparks, open flames, hot surfaces. No smoking. Handle empty containers with care because they may still present a hazard. Use appropriate personal protective equipment (PPE).

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Protect from moisture. Store in original container or corrosive resistant and/or lined container. Store locked up.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Combustible materials. Moisture. Flammable materials. Organic compounds. Wood. Oils and Lubricants. Sulfur compounds. Reducing agents.

Storage Temperature: < 175 °C; Sodium chlorite decomposes at 175°C.

Specific End Use(s)

Disinfectant/Sanitizer/Tuberculocide/Virucide/Fungicide/Algaecide/Slimicide/Deodorizer

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Chlorine dioxide (10049-04-4)		
Mexico	OEL TWA (mg/m^3)	0.3 mg/m^3
Mexico	OEL TWA (ppm)	0.1 ppm
Mexico	OEL STEL (mg/m^3)	0.9 mg/m^3
Mexico	OEL STEL (ppm)	0.3 ppm
USA ACGIH	ACGIH TWA (ppm)	0.1 ppm
USA ACGIH	ACGIH STEL (ppm)	0.3 ppm
USA OSHA	OSHA PEL (TWA) (mg/m^3)	0.3 mg/m^3

USA OSHA	OSHA PEL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.3 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	0.1 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m³)	0.9 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	0.3 ppm
USA IDLH	US IDLH (ppm)	5 ppm

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when toxic gases may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Face shield. Insufficient ventilation: wear respiratory protection.

Materials for Protective Clothing: Chemically resistant materials and fabrics. Corrosion-proof clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles and face shield.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental Exposure Controls: Avoid release to the environment.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Solid
Appearance	:	White Powder
Odor	:	Chlorine
Odor Threshold	:	Not available
pH	:	Not available
Evaporation Rate	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20°C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Soluble in water
Partition Coefficient: N-Octanol/Water	:	Not available
Viscosity	:	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Adding an acid to a base or base to an acid may cause a violent reaction. May cause an explosion through a vigorous reaction of polymerization if contaminated with incompatible materials. Violent exothermic reaction and development of heat with

reducing materials. Potentially explosive reaction with combustible materials. Sodium chlorite reacts with acids to form spontaneously explosive chlorine dioxide gas (ClO_2). Ammonia with chlorites produces ammonium chlorite, which is a shock-sensitive compound. Finely divided metallic or organic substances, if mixed with chlorites, are highly flammable and may be ignited on friction. A mixture of organic matter and sodium chlorite can be extremely sensitive to heat, impact, or friction. Sodium chlorite reacts very violently with organic materials containing divalent sulfur or with free sulfur (may ignite).

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: In large quantities, with excess heat, and with incompatibilities hazardous polymerization may occur.

Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard). Avoid creating or spreading dust.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Combustible materials. Moisture. Flammable materials. Organic compounds. Wood. Oils and Lubricants. Sulfur compounds. Reducing agents.

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

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Oral: Harmful if swallowed.

Acute Toxicity (Dermal): Dermal: Toxic in contact with skin.

Acute Toxicity (Inhalation): Inhalation:dust,mist: Toxic if inhaled.

LD50 and LC50 Data:	
MOMS Unreacted Pouch	
ATE US/CA (oral)	540.98 mg/kg body weight
ATE US/CA (dermal)	351.48 mg/kg body weight
ATE US/CA (dust, mist)	0.75 mg/l/4h

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

Eye Damage/Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs (spleen) through prolonged or repeated exposure.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Inhalation of this material can cause serious health effects in small amounts, leading to unconsciousness and death. Dust may be harmful or cause irritation. May be corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: This material is toxic in small amounts through skin contact, and can cause adverse health effects or death. This material may be absorbed through the skin and eyes. Causes severe irritation which will progress to chemical burns.

Symptoms/Injuries After Eye Contact: Causes serious eye damage. Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia.

Chronic Symptoms: May cause damage to organs (spleen) through prolonged or repeated exposure.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:	
Citric acid (77-92-9)	
LD50 Oral Rat	5400 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
Sodium chlorite (7758-19-2)	

LD50 Oral Rat	165 mg/kg
LD50 Dermal Rabbit	107.2 mg/kg
LC50 Inhalation Rat	230 mg/m³ (Exposure time: 4 h)

Chlorine dioxide (10049-04-4)	
LD50 Oral Rat	93.86 mg/kg (0.2% gas in water)
LC50 Inhalation Rat	32 ppm/4h

Sodium chlorite (7758-19-2)	
IARC Group	3

SECTION 12: ECOLOGICAL INFORMATION

This section is not required according to the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations SOR/2015-17. The information commonly reported under other competent authorities in this section may require separate reporting. Contact the manufacturer for more information.

SECTION 13: DISPOSAL CONSIDERATIONS

This section is not required according to the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations SOR/2015-17. The information commonly reported under other competent authorities in this section may require separate reporting. Contact the manufacturer for more information.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with DOT, IMDG, IATA, TDG

Proper Shipping Name : CORROSIVE SOLIDS, TOXIC, N.O.S. (Sodium chlorite)
Hazard Class : 8
Subsidiary Risk(s) : 6.1
Identification Number : UN2923
Label Codes : 8, 6.1
Packing Group : II
Marine Pollutant : Marine pollutant
ERG Number (DOT) : 154
EmS-No. (Fire) (IMDG) : F-A
EmS-No. (Spillage) (IMDG) : S-B
MFAG Number (IMDG) : 154
ERG Code (IATA) : 8P

or

[DOT] [IMDG, IATA, TDG]

SECTION 15: REGULATORY INFORMATION

This section is not required according to the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations SOR/2015-17. The information commonly reported under other competent authorities in this section may require separate reporting. Contact the manufacturer for more information.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest Revision : 12/07/2017

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US, Mex)