

Nos Guard SG Mold/Mildew Odor Control - Fast Release Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015). Revision Date: 12/07/2017 Date of Issue: 10/12/2015 Version: 2.0

SECTION 1: IDENTIFICATION

Product Identifier	
Product Form: Mixture	

Product Name: Nos Guard SG Mold/Mildew Odor Control - Fast Release

Product Code: 89970, 89965

Intended Use of the Product

Deodorizer

Name, Address, and Telephone of the Responsible Party

Company OdorStar, LLC. 4041 SW 47th Avenue Fort Lauderdale, FL 33314 (954)587-6280

www.odorstar.com

Emergency Telephone Number

Emergency Number : US: (800) 424-9300; International: (703) 527-3887 (CHEMTREC)

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 4	H332
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 0.1 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)



Signal Word (GHS-US/CA) Hazard Statements (GHS-US/CA)

: May form combustible dust concentrations in air.

H302+H332 - Harmful if swallowed or if inhaled.

- H311 Toxic in contact with skin.
- 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.

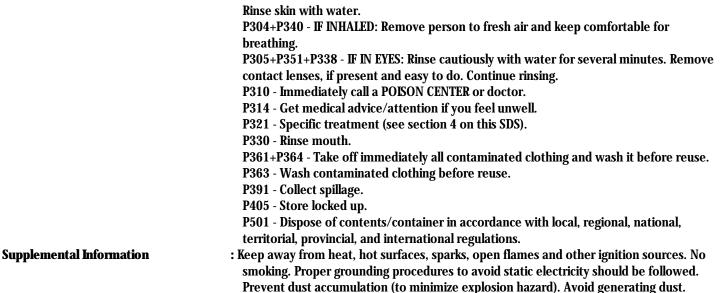
P280 - Wear protective gloves, protective clothing, and eye protection.

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.

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Other Hazards

Hazardous to the aquatic environment - Acute Hazard Category 1 H400 H400 - Very toxic to aquatic life.

P273 - Avoid release to the environment.



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	66.8
Sodium chlorite	(CAS-No.) 7758-19-2	16
Calcium chloride	(CAS-No.) 10043-52-4	13.2

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. Under normal conditions of use this product generates < 100 ppm Chlorine dioxide gas.

Name	Product Identifier	% *
Chlorine dioxide	(CAS-No.) 10049-04-4	100
*Demonstration and listed in weight by weight no	mantage (w/w/) for liquid and calld ingradients	⁷ aa in madianta ana listad in wahuma

*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: 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, physician, or emergency medical service. Immediately call a POISON CENTER or doctor/physician.

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

Inhalation: Inhalation is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. 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 (ClO₂). 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.

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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 place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container. Store locked up.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Combustible materials. May react with 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)

Deodorizer

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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. 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. Insufficient ventilation: wear respiratory protection. Face shield.

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
рН	:	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

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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

<u>Reactivity</u>: 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 (ClO₂). 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.

<u>Conditions to Avoid</u>: 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. May react with 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: Harmful if inhaled.

LD50 and LC50 Data:

Nos Guard SG Mold/Mildew Odor Control - Fast Release

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ATE US/CA (oral)	787.72 mg/kg body weight
ATE US/CA (dermal)	536.00 mg/kg body weight
ATE US/CA (dust, mist)	1.15 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 is likely to cause adverse health effects including but not limited to: irritation, difficulty breathing, and unconsciousness. 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.

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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)

ID50 and LC50 Data:

Sodium chlorite (7758-19-2)		
ID50 Oral Rat	165 mg/kg	
LD50 Dermal Rabbit	107.2 mg/kg	
IC 50 Inhalation Rat	230 mg/m³ (Exposure time: 4 h)	
Citric acid (77-92-9)		
ID50 Oral Rat	5400 mg/kg	
ID50 Dermal Rat	> 2000 mg/kg	
Calcium chloride (10043-52-4)		
ID50 Oral Rat	2301 (1455 - 2781) mg/kg	
ID50 Dermal Rabbit	> 5000 mg/kg	
Chlorine dioxide (10049-04-4)		
ID50 Oral Rat	93.86 mg/kg (0.2% gas in water)	
IC 50 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	POISON X
Identification Number	: UN2923 and	s or
Label Codes	: 8, 6.1	♦ 01
Packing Group	:Ш	[DOT] [IMDG, IATA, TDG]
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	

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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	: 12/07/2017
Revision	
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)