

WORKING SOLUTION SAFETY DATA SHEET

Issue Date: 10/18/2011

Section 1 Product and Company Information			
Product Name	Air Quality Manager - A	QM and Mold Odor Mildew Smoke - MOMS	
Product Use	Chlorine dioxide solution	for use as a cleaner and deodorizer	
Company	OdorXit		
Address	3729 Riva Ridge D rive Han	hilton, OH 45011	
Technical Phone	(513) 895-1000	Emergency Phone (513)-266-4008	
Fax	(513)868-8886		

Section 2 Composition

Hazardous Com	ponent			
Chemical Name	CAS Number	% (weight/weight)	Cl	nemical Symbol
Chlorine dioxide	10049-04	-4 Varies with use,	0.06 max.	ClO ₂

Section 3 Hazards Identification

Emergency Overview

This product is a chlorine dioxide generator. The intact product is not expected to produce any measurable exposure to ingredients. If the product is damaged, avoid contact with dry ingredients; they may cause irritation or burns in direct contact with skin or eyes. The Material Safety Data Sheet for dry ingredients follows this Working Solution Safety Data Sheet.

The quantity of active ingredient is less than or equal to 0.5 grams. Chlorine dioxide gas is not expected to be released in amounts or at a rate at which significant exposure could occur with normal handling and use. If not used according to directions, it is possible that some chlorine dioxide gas could be released into small, enclosed spaces in sufficient quantities to be detectable. If this occurs and a chlorine-like odor is detected in such a space, ventilate and leave the space.

Eye:	Direct contact with this working solution may cause irritation and possibly burns with symptoms of redness, tearing, and eye damage due to burns.
Skin:	Direct contact with this working solution may cause irritation and/or burns with symptoms of itching, redness, swelling and possible skin damage.
Ingestion:	Swallowing this working solution may cause symptoms of nausea or vomiting. Do not induce vomiting. For solutions 3-10 times and above more concentrated than this working solution, ingestion may be harmful and lead to nausea, vomiting, lethargy, diarrhea, bleeding or ulceration.
Inhalation:	Avoid direct inhalation of solution. Chlorine dioxide gas can volatilize, causing some gas to enter the air surrounding the solution. At high concentrations of chlorine dioxide gas in air, respiratory irritation can occur. High exposure may cause bronchiospasm and pulmonary edema, which may be delayed in onset. May also cause headache.

Section 4 First Aid Measures		
Eye:	If solution comes in contact with eyes, rinse immediately with water.	
Skin:	If solution comes in contact with skin, rinse affected area immediately with water.	
Ingestion:	Do not induce vomiting. Give water to drink. Seek medical advice where necessary. Do	
	not give anything by mouth if person is unconscious or having seizures.	
Inhalation:	Avoid direct inhalation of solution. If symptoms occur, remove to fresh air. If irritation or	
	discomfort persists, administer oxygen and seek medical attention.	

Section 5 Fire Fighting Measures	
Flash Point	Autoignition Temperature
Not Applicable	Not Applicable
Elemental Limita in Air (noncont huvelume)	

Flammable Limits in Air (percent by volume) Not Applicable

Extinguishing Media

OdorXit

Not Applicable- Choose extinguishing media suitable for surrounding materials

Fire Fighting Techniques and Comments

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Use flooding quantities of water as fog or spray. Use water spray to keep fire-exposed containers cool. Extinguish fire using agent suitable for surrounding fire. Wear self-contained breathing apparatus and protective clothing when fighting fires involving chemicals.

Section 6 Accidental Release Measures

Environmental Precautions: Environmental precautions required; however, chlorine dioxide degrades into salts in the environment.

Methods for Cleaning Up: Flush to drain with water or soak up onto inert material and dispose of into bag. Hold bag for waste pickup.

Section 7 Handling and Storage

Handling:	Wear appropriate gloves with this material. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Use safe handling in accordance with label instructions. Do not mix with other chemicals. Keep solution away from children.
Storage:	During use, keep solution out of direct sunlight. After use, dispose of chlorine dioxide solution by flushing to drain. See following MSDS of sodium chlorite for handling and storage of inactivated product.

Section 8 Exposure Control / Personal Protection

Eye Protection:	Avoid contact with eyes.
Skin Protection:	Wear gloves. Avoid contact with skin.
Respiratory:	Low risk when handling product as directed. Avoid direct inhalation of solution.
	Where overexposure to chlorine dioxide might occur, use appropriate respiratory
	protection and follow OSHA requirements as specified by 29 CFR 1910.134 and 29
	CFR 1910.1000. A NIOSH-approved air-purifying respirator or a NIOSH
	approved canister/cartridge respirator rated for chlorine/acid gas or specified for
	chlorine dioxide may be appropriate in situations of overexposure.
General:	When using over prolonged periods of time, provide ventilation to control worker
	exposure and prevent health risk. Provide an eyewash fountain and safety shower in
	close proximity to points of potential exposure.

Section 9 Physical and Chemical Properties

or:Slight chlorine odorling point:As waterezing point:As waterpor Pressure:No datalatile (% by volume):No data

Section 10 Stability and Reactivity		
cection to coupling and reactivity		
Chemical Stability:	Stable	
Conditions to Avoid:	For solution, avoid temperatures above 140 °F (60 °C). Avoid direct contact	
	with sunlight.	
Incompatibility: Decomposition Products:	Solution not intended to be mixed with other chemicals.	
Decomposition i foducts.	presence of reducing agent	
Hazardous Polymerization:	Will not occur.	
-		
Section 11 Toxicology Information		
LD50 (oral. rat):	278 mg/kg	
ACGIH (ClO ₂ gas):	0.1 ppm (TWA), 0.3 (STEL)	
Sensitization (guinea pig):	Negative	
Carcinogenicity:	Group D carcinogen (not classifiable as a human carcinogen).	
Mutagenicity:	No human data available.	
Reproductive Toxicity:	No effects were observed at 10 ppm or higher concentration of sodium chlorite in the drinking water in animal testing	
	enome in the drinking water in annual testing.	
Section 12 Ecological Information		
Ecotoxicological Information: Persistance and Degredation:	No data available No data available. No expected persistence	
reisistance and Degredation.	ivo data available. Ivo expected persistence.	
Section 13 Disposal Considerations		
Solution to be disposed of in accordance wit	th spillage instructions as explained in accidental release measures. Used/	
activated pouches are considered inert and n	nay be disposed of as normal waste in accordance with local authority	
regulations.		
Section 14 Transport Information		
Shipping Information:	Chlorine dioxide may not be shipped as gas or as a solution. For shipment of product in inactivated form, see MSDS for sodium chlorite	
	product in macuvated form, see model for socialin emotion.	
Section 15 Regulatory Information		
TOVIC SUBSTANICES CONTTDOL AC	т	
The components of this product are listed o	n the Toxic Substance Control Act (TSCA) inventory	
I I I I I I I I I I I I I I I I I I I		
US FEDERAL REGULATIONS:		
Clean Air Act:	Not applicable	
CERCLA SSECTION 103 (40 CFR § 302 SARA SECTION 302 (40 CFR § 355 30)		
SARA SECTION 302 (40 CFR § 355.50).	Not applicable.	
SARA (EPCRA) SECTION 313 (40 CFR	§ 372.65): Chlorine dioxide produced from activated product is	
listed under SARA 313 with a 24,0000-pouc	nd threshold for manufactured product.	
OSHA PROCESS SAFETY (29 CFR § 19	210.119): Not regulated.	
SARA HAZARD CATEGORIES, SARA	SECTIONS 311/312 (40 CFR § 370.21): 10,000 lb threshold.	
Αυμε μαζακμ: Chronic μαζαρφ	Irritant. Nope known	
FIRE HAZARD:	Oxidizer.	
REACTIVITY HAZARD:	Oxidizer.	
SUDDEN RELEASE HAZARD:	Not applicable.	

STATE REPORTING REQUIREMENTS:

California Proposition 65: Not regulated. New Jersey: See Section II.

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW (40 CFR 355, APP.A)

EXTREMELY HAZARDOUS SUBSTANCE (EHS) - PLANNING QUANTITY None Established

SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45

None Required

FOR ADDITIONAL INFORMATION CALL: 614-340-1862 (During business hours, Eastern Standard Time)

NOTICE: All information appearing herein is based upon data obtained from the manufacturer and its distributors. While the information is believed to be accurate, Listening Systems, Inc./dba OdorXit Products makes no representations as to its accuracy or sufficiency; conditions of use are beyond Listening Systems, Inc./dba OdorXit Products control and therefore users are responsible to verify this information under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.



Section 1 Product and Company Information

Product Name Product Use	Air Quality Manager – AQM / Mold Odor M Delivery system (pouch) for the generation of a a cleaner and deodorizer	lildew Smoke - MOMS chlorine dioxide for use as
Company	OdorXit Products	
Address	63729 Riva Ridge Drive Hamilton, OH 45011	
Technical Phone	(513) 895-1000	Emergency Phone (513) 266-4008
Fax	(513) 868-8886	

Section 2 Composition / Information on Ingredients

Hazardous Component

Chemical Name	CAS Number	% (by weight)	Exposure Standards
Sodium Chlorite	7758-19-2	36-37	None Established
Sodium Chlorate	7777-09-9	1.8 max	None Established
Sodium Hydroxide	1310-73-2	1.4 max	OSHA: 2 mg/m3
Sodium Persulfate	775-27-1	54-55	None established

Section 3 Hazards Identification

Emergency Overview

White crystals/powder, slight chlorine odor, strong oxidizer. May cause irritation or burns to skin, eyes, and respiratory track.

Potential Health Effects

Eye:	Direct contact with this product intact should cause no harm. Should the product be
	damaged and the contents spill out, direct contact with the active materials may cause severe
	irritation and possibly burns with symptoms of redness, tearing, and eye damage.
Skin:	Direct contact with this product intact should cause no harm. Should the product be
	damaged and the contents spill out, direct skin contact with the active materials may cause
	irritation and/or burns with symptoms of itching, redness, swelling and possible skin damage.
Ingestion:	Swallowing the active material contents of this product may be extremely harmful with
	symptoms of nausea, vomiting, lethargy, diarrhea, bleeding or ulceration. May cause anemia
	due to the oxidizing effects of sodium chlorite.
Inhalation:	Should the product be damaged and the contents spill out, inhaling the active material
	contents of this product may cause irritation of the mucous membranes and respiratory tract
	with symptoms of sneezing, coughing and bloody nose. Severe overexposure to the active
	material contents inside this product may cause lung damage.

Section 4 First Aid Measures

Eye:	Immediately flush eyes with water for at least 15 minutes, lifting eyelids to thoroughly flush.
Skin:	Remove contaminated clothing and flush affected skin area with water for at least 15 minutes. Seek medical attention if burning or irritation of the skin persists. Launder clothing
	before reuse.
Ingestion:	Drink large quantities of water and seek medical attention immediately. DO NOT induce vomiting. DO NOT give anything by mouth if the person is unconscious or having seizures.
Inhalation:	Remove to fresh air. If irritation or discomfort persists, administer oxygen and seek medical attention immediately.

Notes to Physician

Chlorine dioxide vapors are emitted when this product contacts water, acids or chlorine. If these vapors are inhaled in large quantities, monitor patient closely for delayed development of pulmonary edema which may occur up to 48-72 hours post-inhalation. For further information on first aid measures for the product in solution, please see the Working Solution Safety Data Sheet.

Section 5 Fire Fighting Measures

Flash Point:	Not Applicable
Autoignition Temperature:	Not Applicable
Flammable Limits in Air :	Not Applicable
(% by volume)	**
Extinguishing Media: Deluge with water.	Do NOT use carbon dioxide or other gas filled fire extinguishers. They will have NO effect decomposing material. Choose extinguishing media suitable for surrounding materials
Unusual Fire Explosion Hazard:	Decomposes when heated with liberation of oxygen which may intensify fire. Presence of moisture accelerates decomposition.

Fire Fighting Techniques and Comments:

Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Use flooding quantities of water as fog or spray. Use water spray to keep fire-exposed containers cool. Extinguish fire using agent suitable for surrounding fire. Wear self-contained breathing apparatus and protective clothing when fighting fires involving chemicals.

Section 6 Accidental Release Measures

Methods for Cleaning Up Spill

Clean up all spills immediately, observing all protection and safety precautions. Small spills of either dry or activated product may be flushed with large quantities of water to a designated sewer system. Larger spills should be contained and neutralized by adding sufficient water to produce a dilute solution and flushed to a designated sewer system in compliance with all federal, state, and local regulations, or should be disposed of as chemical waste in accordance with all applicable regulations. The spill scene should be ventilated and flushed thoroughly with water after cleanup.

Section 7 Handling and Storage

Handling:	Wear rubber gloves when handling. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
Storage:	Store in a cool, dry place and ensure that there is adequate ventilation. Do not expose to direct light. Do not expose to moisture during storage. This product should only be removed from the metalized/foil pouch immediately prior to use.

Section 8 Exposure Control / Personal Protection

Engineering Control:	General exhaust ventilation is sufficient for safe use of this product. Avoid breathing any vapors, mists, or fumes generated by the activated product. Local exhaust ventilation may be appropriate in applications in confined spaces or where large quantities of the products are used.
Eye Protection:	Avoid contact with eyes. Wear protective goggles.
Skin Protection:	None normally required when handling intact product. If handling dry ingredients
	in product, and when handling generated chlorine dioxide solution, use chemical resistant gloves.
Respiratory:	None normally required when handling intact product. Should product spill, use NIOSH/MSHA approved respirators.
General:	Provide ventilation to control worker exposure and prevent health risk. Provide an eyewash fountain and safety shower in close proximity to points of potential exposure.

Section 9 Physical and Chemical Properties

Appearance and Odor:	White powder	Odor: Slight chlorine odor	
Melting Point: Solubility in water: pH @ 25°C:	338°F (170°C) Complete Contain both neutral	Decomposition Temperature: Bulk Density: Vapor Pressure: No data	> 338 °F (170 °C) No data
OdorXit	Safety Data Sheet: AQ	M/MOMS Working Solution + Dr	y Chemical 6 of 8

and basic components No data Volatiles (% by volume): No data

Section 10 Stability and Reactivity		
Chemical Stability:	Stable	
Conditions to Avoid:	Temperatures above 338 °F (170 °C), do not store dry product where	
	exposed to moist conditions and contamination with combustible materials.	
Incompatibility:	Acids, reducing agents, combustible materials, oxidizers (eg. hypochlorites),	
	sulfur-containing rubber, dirt, soap, solvents, paints.	
Decomposition Products:	In large quantities, explosive and toxic chlorine dioxide gas will be	
	generated on contact with acids or chlorine.	
Hazardous Polymerization: Will not occur.		

Section 11 Toxicology Information

Routes of Exposure

Specific Gravity:

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*Contact with the intact product should not provide any substantial exposure to the active material contents. The following toxicology information concerns the active material contents in the product which would not come into contact with humans unless the product is damaged or is not used as directed.

Inhalation:	Inhalation may cause irritation of the mucous membranes and respiratory tract. Symptoms may include coughing, bloody nose, and sneezing. Severe overexposures may cause lung damage or asthma.
Skin:	Direct contact may cause severe irritation and/or burns with symptoms of redness, itching, swelling and possible destruction of tissue.
Eye:	Mist or direct contact may cause severe irritation and possibly burns. Symptoms may include tearing, redness and in severe cases, eye damage due to burns.
Ingestion:	Gastroenteritis with any or all of the following symptoms: nausea, lethargy, diarrhea, bleeding or ulceration. Acute ingestion of large quantities may also cause anemia due to the oxidizing effects of the chemical.
Carcinogenicity:	Not listed in OSHA, EPA, NTP, IARC or any other authority as a carcinogen.
Reproductive Toxicity:	No indication of developmental toxicity observed in rats or mice.

Section 12 Ecological Information

Ecotoxicological Information

Sodium chlorite is slightly toxic to fish and other aquatic organisms. For bluegill (Lepomis macrochirus), aquatic toxicity studies have shown a TL50 of 208 mg/l and LC50 values of 265-310 mg/l. rainbow trout (Salmo gairdneri) have been tested and shown acute toxicity values of 50.6 mg/l (TL50) and 290 mg/l (LC50). Of the aquatic species tested, Daphnia have been the most sensitive species tested with an LC50 of 0.29 mg/l.

Environmental Fate Information		
Soil:	Sodium chlorite could generate chlorine dioxide when in contact with acidic soil. However	
	both sodium chlorite and chlorine dioxide will degrade to sodium chloride in the presence	
	of reducing agents in soil. Sodium persulfate will degrade to sulfate ions.	
Water:	Sodium chlorite in water will eventually degrade to chloride ions in the presence of	
	reducing agents in natural water. Sodium persulfate will degrade to sulfate ions.	

Section 13 Disposal Considerations

Disposal of the working solution may occur by flushing through a designated drain to sewer. See Working Solution Safety Data Sheet for more information.

Section 14 Transport Information

This material is regulated as a DOT hazardous material.

DOT Shipping Description (49 CFR 172.101)

Sodium Chlorite, 5.1, UN 1496, II

The applicable packaging section is 49 CFR 173.4 (small quantity - maximum amount of sodium chlorite per individual receptacle is 30 grams). Oxidizer placard not required. Outside package must be marked as follows: "This package conforms to 49 CFR 173.4."

Section 15 Regulatory Information

TOXIC SUBSTANCES CONTROL ACT

THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE Toxic Substance Control Act (TSCA) Inventory

SUPERFUND AMMENDMENTS AND REAUTHORIZATION ACT (SARA) TITLE III HAZARD CATEGORIES (40 CFR 370.2)

HEALTH: Immediate (Acute), Delayed (Chronic) PHYSICAL: Fire

EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW (40 CFR 355, APP.A)

EXTREMELY HAZARDOUS SUBSTANCE (EHS) - PLANNING QUANTITY

None Established

SUPPLIER NOTIFICATION REQUIREMENTS, PER 40 CFR 372.45

None Required

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