

**BECKART ENVIRONMENTAL, INC.**

6900 46TH STREET  
KENOSHA, WI 53144  
PHONE # (262) 656-7680

Safety Data Sheet  
Revision date: 7/16/15

This SDS complies with 29 CFR 1910.1200 and appendix D (The Hazard Communication Standard- GHS)

**SECTION 1: IDENTIFICATION:**

**PRODUCT NAME:** Air Fresh 101  
**PRODUCT TYPE:** Deodorizing delivery system for the generation of chlorine dioxide  
**CHEMICAL NAME:** Contains Sodium Chlorite and additives

**SUPPLIER:**

BECKART ENVIRONMENTAL  
6900 46<sup>TH</sup> STREET  
KENOSHA, WI 53144  
PHONE: (262)656-7680 FAX: (262)656-7699

**EMERGENCY 24/7 CONTACT**

CHEMTREC PHONE 1-800-424-9300

**SECTION 2: HAZARDS IDENTIFICATION:**

**Emergency Overview**

**GHS Classification:**

Oxidizing solids (Category 2)  
Acute Toxicity- Oral (Category 3)  
Acute Toxicity- Dermal (Category 2)  
Acute Toxicity- (inhalation: dust, mist) (Category 2)  
Corrosion- Causes severe skin burns and eye damage (Category 1B)  
Eye damage- Serious eye damage/eye irritation (Category 1)  
Aquatic toxicity (Category 1)

**GHS Label elements, including precautionary statements**

**Pictograms**



**GHS Signal Word**

**Danger**

**GHS Hazard statement(s):**

May intensify fire: oxidizer  
Contact with water releases flammable gas.  
Contact with acid releases toxic gas.  
Harmful if swallowed.  
Causes skin irritation and serious eye damage.  
Causes serious skin burns.  
Toxic to aquatic life.

**Precautionary statement(s)- PREVENTION:**

Obtain special instructions before use.  
Do not Handle until all safety precautions have been read and understood.  
Keep away from heat, sparks, open flames, hot surfaces, no smoking  
Keep/Store away from clothing/ combustible materials.  
Keep container closed.  
Do not allow contact with water/ protect from moisture.  
Wear protective gloves/eye protection and face protection.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product  
Do not breathe dust/fume/gas/mist/vapors/spray.

**Precautionary statement(s)- RESPONSE:**

In case of fire: use water, sand to extinguish.

IF SWALLOWED: Rinse mouth. Call a poison center/doctor if you feel unwell..

IF ON SKIN (or hair) : Remove/take off immediately all contaminated clothing and wash before reuse. Rinse skin with water/shower. If skin irritation occurs: Get medical attention/advice. Call a poison center/doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

If exposed or concerned: Call a poison center/doctor seek medical advice.

Collect spillage. Store in dry place. Store in a closed container. Store locked up.

Dispose of contents/container to comply with local, state and federal regulations.

**Other Hazards Not Contributing to the Classification:** Not available.

**Unknown Acute Toxicity:** Not available.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS:**

| <b><u>Ingredient</u></b> | <b><u>CAS #:</u></b> | <b><u>Percent (%)</u></b> | <b><u>EC-No</u></b> |
|--------------------------|----------------------|---------------------------|---------------------|
| Sodium Chlorite          | 7758-19-2            | 8-24%                     | 231-836-6           |

\*A range of concentration as prescribed by the Controlled Products Regulations has been used where necessary, due to varying composition. The specific chemical identity and/or exact percentage of composition has been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200].

**SECTION 4: FIRST AID MEASURES:**

**General:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**If inhaled:** Using proper respiratory protection, immediately move the exposed person to fresh air. Keep at rest and in a position comfortable for breathing. Seek medical attention immediately. If not breathing, give artificial respiration.

**In case of skin contact:** Take off contaminated clothing and shoes immediately. Flush skin with soap and plenty of water. Immediately call a POISON CENTER or doctor/physician.

**In case of eye contact:** Immediately rinse with water for at least 15 minutes while holding the eyelids wide open. Immediately call a POISON CENTER or doctor/physician. Continue rinsing eyes during transport to hospital.

**If swallowed:** Do NOT induce vomiting. Seek medical attention immediately.

**Most Important Symptoms/ Effects (Acute and Delayed)**

**General:** Causes skin burns and eye damage

**Inhalation (Breathing):** Fatal if inhaled.

**Skin:** Serious skin burns in contact with skin.

**Eye:** Causes serious eye damage.

**Ingestion (Swallowing):** Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard.

**Indication of any immediate medical attention and special treatment needed:**

If you feel unwell, seek medical advice (show label where possible).

**SECTION 5: FIREFIGHTING MEASURES:****Extinguishing media:**

**Suitable extinguishing media:** Use extinguishing agents 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 flammable, may intensify fire: oxidizer.

**Explosion Hazard:** Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. Chlorine dioxide gas evaporated from solutions may explode at concentrations of 10% by volume. Don't allow chlorine dioxide gas to accumulate with a confined space.

**Reactivity:** Thermal decomposition generates: corrosive vapors.

**Advice for Firefighters:**

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire. Under fire conditions, hazardous fumes will be present. Open/vent containers. Do not allow solutions to evaporate to dryness. Vent to atmosphere.

**Firefighting Instructions:** Keep upwind. Use water spray or fog for cooling exposed containers.

**Protection during firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection. Notify appropriate authorities if liquid enters sewers or waterways.

**Hazardous combustion Products:** Corrosive vapors. Acrid smoke and irritating fumes.

**Other information:** Do not allow run-off from fire fighting to enter drains or water sources.

**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 all unnecessary exposure. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Ensure adequate ventilation. No smoking.

**For Non-Emergency Personnel**

**Protective equipment:** Use appropriate personal protection equipment (PPE), safety glasses, gloves, dust mask.

**Emergency procedures:** Evacuate unnecessary personnel. Keep upwind.

**For Emergency Personnel**

**Protective equipment:** Equip cleanup crew with proper protection.

**Emergency procedures:** Ventilate area. Eliminate ignition sources.

**Environmental Precautions**

If spill could potentially enter any waterway, including intermittent dry creeks, contact the U.S. COAST GUARD NATIONAL RESPONSE CENTER at 800-424-8802. In case of accident or road spill notify CHEMTREC at 800-424-9300 (in USA) or (international code) + 1-703-527-3887.

**Methods and materials for containment and cleaning up**

**Methods for cleaning up:** Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by we-brushing and place in container for disposal according to local regulations. . Clear up spills immediately and dispose of waste safely. Practice good housekeeping. Dilute chlorine dioxide solutions (100-200ppm) do not need to be pH neutralized. Flush residual material, down drain with an excess of water, in accordance with local regulations.

**Reference to other sections:** See heading 8, Exposure Controls and Personal Protection.

**SECTION 7: HANDLING AND STORAGE:**

**Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well ventilated location, away from incompatible /flammable materials and direct sunlight. Keep container tightly closed when unused.

**Incompatible Materials:** Store away from flammable materials. Keep away from acids. Protect against moisture or humidity. Keep away from metal, metal salts, bases, reducing agents and combustible materials.

**Specific End Uses**

Use product only as directed by label. Store only in original packaging. Keep away from children/animals. Avoid contact with skin/eyes. Avoid breathing any vapors/fumes.

**SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION:**

**Exposure controls**

**Appropriate Engineering controls:** Use approved air purifying respirators/canister/Cartridge facial respirators rated for chlorine/acid vapors specified for chlorine dioxide when fogging/spraying. Open air/ good ventilation is normally adequate for safe use of product.

**Personal Protective Equipment:** Avoid all unnecessary exposure. Wear respiratory protection if required. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust. Protective goggles. Gloves. Protective clothing.

**Materials for protective clothing:** Wear suitable protective clothing, Rubber/neoprene/chemically impervious.

**Hand protection:** Impermeable protective gloves. Nitrile rubber, neoprene.

**Eye protection:** A full face shield is recommended. Chemical goggles.

**Skin and body protection:** Wear suitable protective clothing. Chemical resistant suit.

**Respiratory protection:** Use a NIOSH approved respirator or self contained breathing apparatus whenever exposure may exceed established Occupations Exposure Limits. Where risk assessment shows air purifying respirators are appropriate use a full face particle respirator type N100.

**Environmental Exposure Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

**Consumer Exposure controls:** Do not eat, drink or smoke during use.

**Supplemental safety and Health:** Open and vent any large containers. Thoroughly rinse all protective gear and handling equipment with water prior to reuse/storage. Product may Bleach clothing and fabric materials such as draperies and carpets. Don't allow chlorine dioxide gas to accumulate within a confined space.

#### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES:**

**Physical state:** solid, granular

**Appearance:** White

**Odor:** Chlorine (like) odor, slight

**pH value:** 1.45 approx, 40g/l water

**Melting point:** Not available

**Stability:** 1 year

**Solubility:** reacts with water to produce yellow liquid

#### **SECTION 10: STABILITY AND REACTIVITY:**

**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, moisture, extremely high or low temperatures, open flames, sources of ignition and incompatible materials.

**Incompatible materials:** Metal salts, reducing agents, acids, oxidizers, combustibles.

**Hazardous decomposition products:** Upon exposure to water vapor, chlorine dioxide gas is released.

#### **SECTION 11: TOXICOLOGICAL INFORMATION:**

##### **Acute toxicity- Dermal:**

100ppm chlorine dioxide solution: Acute dermal LD50(rat) . 5,000mg/kg

200ppm chlorine dioxide solution: Acute inhalation LC50 (rat,4hr)>2.7mg/l

##### **Acute toxicity- Inhalation:**

100ppm chlorine dioxide solution: Primary dermal irritation index (rabbit)=0.1 slightly irritating.

100ppm chlorine dioxide: Primary eye irritation index (rabbit)= non-irritating

100ppm chlorine dioxide: Dermal sensitization (guinea pig)= not a contact sensitizer

Note: Upon exposure to moisture, this product releases chlorine dioxide gas. The oral LD50 in rats for chlorinated dioxide has been reported as 292mg/kg

Inhalation: exposure to dust particles from this product causes irritation of the respiratory tract. May result in coughing, difficult breathing and sore throat. Exposure to high concentrations may result in burns of the mucous membranes, bronchospasm and delayed pulmonary edema.

Ingestion: Harmful if swallowed. May cause pain, nausea, vomit and diarrhea. May cause burns of the mouth, throat and stomach. Causes severe tissue damage.

Skin contact: causes skin irritation. Contact with moist skin causes burns. Prolonged contact may cause dermatitis. Contact with chlorine dioxide solution (100ppm) was slightly irritating to rabbit skin.

Eye contact: Causes severe eye irritation. May cause eye burns and damage.

Other effects: NOTE: Upon exposure to moisture, this product releases chlorine dioxide gas. Inhalation of ClO<sub>2</sub> gas may cause irritation, coughing, wheezing and burns of the mucous membranes. Inhalation of large amounts may lead to pulmonary edema and bronchitis. Direct contact with ClO<sub>2</sub> gas causes eye and skin irritation and may cause burns. Prolonged or repeated exposure to dust may cause pulmonary problems.

#### **SECTION 12: ECOLOGICAL INFORMATION:**

##### **Toxicity**

Fish toxicity: LD50(96h)=100-2000mg/l (Brachydanio rerio, OECD 203)

Bacteria toxicity: EC50=100-800mg/l (OECD 209)

Environmental fate: May cause long term adverse effects in the aquatic environment. Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

**Persistence and Degradability** Not established

**Bioaccumulative Potential:** not applicable

**Mobility in soil** Not available

**Other adverse effects** Avoid release to the environment

**SECTION 13: DISPOSAL INFORMATION:**

**Waste Treatment methods:** Dispose of waste material in accordance with all local, regional, national, and international regulations. Large volumes should be taken to an authorized chemical disposal site/landfill in accordance with local and national regulations. Used product may have different hazards or properties than the original product.

**Sewage Disposal Recommendations:** Do not dispose of waste into sewer. Do not empty into drains; dispose of this material and its container in a safe way. Avoid release to the environment.

**SECTION 14: TRANSPORT INFORMATION:**

**U.S. DOT 49 CFR 172.101:** UN2813, Water reactive solid, N.O.S., 4.3, PGII

**DOT Small Quantity Exception:**

***This package conforms to 49 CFR 173.4 for domestic highway or rail transport only.***

**SECTION 15: REGULATORY INFORMATION:**

**US Federal Regulations**

**OSHA REGULATORY STATUS:** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**TSCA:** Sodium Chlorite (7758-19-2) Listed on the US TSCA (Toxic Substances Control Act) inventory

**Canadian Regulations:** Sodium Chlorite (7758-19-2) **WHMIS Classification:**

Class C- Oxidizing material

Class D Division 1 Subdivision A- Very toxic material causing immediate and serious toxic effects.

Class E- Corrosive Material

**SECTION 16: OTHER INFORMATION:**

Revision date: 7/16/15

Health- 3 Serious hazard- major injury likely unless prompt action is taken and medical treatment is given

Flammability- 0 minimal hazard

Physical- 0 minimal hazard

Personal protection: F

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