

## Material Safety Data Sheet

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY INFORMATION

**Product Name:** Bioxide® Plus 3750

**Chemical Family:** Odor Control Compound

**Manufacturer's Name:** Siemens Industry, Inc. - Water Technologies Business Unit

**Address:** 2650 Tallevast Road, Sarasota, FL 34243

**Product/Technical Information Phone Number:** 1.941.355.2971

**Medical/Handling Emergency Phone Number:** CHEMTREC 1.800.424.9300  
24 hours a day

**Transportation Emergency Phone Number:** CHEMTREC 1.800.424.9300  
24 hours a day

**Issue Date:** January 2009

**Revision Number / Date:** Rev 1 April 2011

### SECTION 2 – COMPOSITION INFORMATION

<u>Chemical Name</u>	<u>Percent by Weight</u>	<u>CAS#</u>
Sodium Nitrate	< 40	7631-99-4
Proprietary Oxidant	<5	Proprietary
Water	Balance	7732-18-5

### SECTION 3 – HAZARDS IDENTIFICATION

**Appearance & Odor:** Colorless to amber liquid with slight chlorine odor.

**Emergency Overview:** Spills may not be visible on the floor and may be slippery. Do not allow product to evaporate to dryness as it may then become explosive.

**Fire & Explosion Hazards:** This material is not flammable. Oxidizer

**Primary Route(s) of Exposure:** Skin and eye contact, inhalation.

**Inhalation – Acute Effects:** Inhalation of vapors or mists may irritate respiratory tract. Excessive concentrations or prolonged exposure may damage respiratory tract.

**Skin Contact – Acute Effects:** Occasional brief contact is not expected to result in significant irritation. Prolonged contact may cause irritation.

**Eye Contact – Acute Effects:** This product may irritate the eyes and prolonged contact may damage the eyes.

**Ingestion – Acute Effects:** May be harmful if swallowed. May cause gastrointestinal irritation and nausea.

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### SECTION 4 – FIRST AID MEASURES

**Inhalation First Aid:** Remove affected person to fresh air. Give artificial respiration ONLY if breathing has stopped. Get medical attention if individual shows symptoms of exposure.

**Skin Contact First Aid:** Immediately remove clothing from affected area and wash skin with flowing water for 15 minutes. Clothing must be washed before reuse. Obtain medical attention if irritation occurs.

**Eye Contact First Aid:** Immediately irrigate eyes with flowing water for 15-20 minutes while holding eye lids open. Contacts should be removed before or during flushing. Obtain immediate medical attention.

**Ingestion First Aid:** If victim is alert and not convulsing rinse mouth with water and give water to drink. DO NOT induce vomiting. If spontaneous vomiting occurs, have affected person lean forward with head down to maintain an open breathing passage. Obtain medical attention immediately.

**Medical Conditions Aggravated:** Pre-existing disorders of the following organs or systems: respiratory system, including asthma and other breathing disorders and the gastrointestinal system.

**Note to Physician:** Treat symptomatically.

### SECTION 5 – FIRE FIGHTING MEASURES

**Flash Point/Method:** Not applicable.

**Auto Ignition Temperature:** Not applicable. **Upper/Lower Explosion Limits:** Not applicable.

**Extinguishing Media:** Use water only. Do not use dry chemical, carbon dioxide or halon.

**Fire Fighting Procedures:** As with any fire, fire-fighters should wear full protective clothing and a NIOSH-approved self-contained breathing apparatus with a full face-piece operated in the positive pressure mode. Use flooding quantities of water as a fog or spray. This product becomes a fire or explosion hazard if allowed to dry so use water spray to keep fire-exposed containers cool.

**Unusual Fire & Explosion Hazards:** Minimal hazards unless the liquid is allowed to evaporate.

**Hazardous Products of Decomposition and/or Combustion:** After evaporation of all the water, the residual solid material may explode if heated to over 1000° F. The dried material will generate gaseous oxides of sodium and nitrogen when heated above its melting point.

**NFPA Ratings:** HEALTH - 1 FLAMMABILITY - 0 REACTIVITY - 1

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment (see Section 8). Stop leak if safe to do so without risk. Ventilate area. If safe to do so absorb spill with inert materials such as dry sand or earth, then place into a chemical waste container. Do not use organic materials such as wood shavings or paper to absorb spills. Flush area with flooding amounts of water.

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All disposal methods must be in compliance with all Federal, State, Local and Provincial laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

### SECTION 7 – HANDLING AND STORAGE

**Handling:** Wash thoroughly after handling, immediately remove and dispose of any spillage. Immediately rinse contaminated clothing thoroughly with water. Rinse containers with water only.

**Storage:** Store in a cool, well ventilated place away from incompatible materials such as combustible, organic, and other readily oxidizable materials. Avoid storage on wooden floors. Do not allow the liquid to evaporate.

### SECTION 8 – PERSONAL PROTECTION/ EXPOSURE CONTROL

**Respiratory Protection:** Not required under normal use conditions. If use conditions generate mists, wear a NIOSH approved respirator with acid gas cartridges.

**Skin Protection:** Wear rubber protective gloves and other protective clothing as appropriate to prevent skin contact. Wear a rubber apron if splashing is likely

**Eye Protection:** Wear chemical goggles. If use conditions generate splashing, wear a face shield in addition to chemical goggles.

**Ventilation Protection:** General exhaust ventilation is adequate under normal use conditions. If use conditions generate mists or vapors, provide local exhaust ventilation.

**Other Protection:** Recommend means of washing the eyes with a gentle flow of cool to tepid water be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather. Employees should wash their hands and face before eating, drinking, or using tobacco products.

**Exposure Limits:** No occupational exposure limits have been established for this product.

### SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Boiling Point:** > 212 deg F                      **Freezing Point:** < 15<sup>0</sup> F

**Specific Gravity:** 1.29 – 1.33 at 70<sup>0</sup> F                      **pH:** 8.8 – 11

**Solubility in Water:** Complete

### SECTION 10 – STABILITY AND REACTIVITY

**Stability:** Stable

**Incompatibilities:** This product is incompatible with wood, paper, combustible materials, cyanides, sodium hypophosphite, or boron phosphide.

**Hazardous Polymerization:** Will not occur.

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**Hazardous Decomposition Products:** After water has evaporated, this material may thermally decompose producing oxides of nitrogen. Explosive and toxic chlorine gas will be generated on contact with acids or chlorine.

**Conditions to Avoid:** Avoid evaporation to dryness. Do not heat solution to temperatures about 1000° F as an explosion may occur in the presence of reducing agents or inorganic materials.

### SECTION 11 – TOXICOLOGICAL INFORMATION

**Toxicological Data:** No data are available for this material. However, for sodium nitrate, a component of this material:

Oral LD 50 (rat) = 1267 mg / kg.

**Chronic Effects:** The toxicity of nitrates is due to their in vivo conversion to nitrites which may lead to methemoglobinemia. Sodium nitrate may react with secondary and tertiary amines to form nitrosoamines, some of which are suspect cancer agents.

**Carcinogenicity / Mutagenicity:** No carcinogenic or mutagenic properties of this product are known.

**Neurotoxicity:** No neurotoxic effects of this product are known.

**Other Effects:** Ingestion of this material may cause adverse effects on the blood, resulting in the formation of methemoglobin.

**Target Organs:** Skin, eyes, digestive tract, respiratory tract.

### SECTION 12 – ECOLOGICAL INFORMATION

The ecological effects of this material are not known. Safely store this material to prevent its release to the environment and aquatic systems.

### SECTION 13 – DISPOSAL CONSIDERATIONS

Material that cannot be used, or reprocessed for use, and empty containers should be disposed of in accordance with all applicable regulations. Product containers should be thoroughly emptied before disposal. Generators of waste material are required to evaluate all waste for compliance with RCRA and any local disposal procedures and regulations. NOTE: State and local regulations may be more stringent than federal regulations.

### SECTION 14 – TRANSPORTATION INFORMATION

**Domestic Transportation:** This material is not a hazardous material for US domestic transportation purposes.

**International Transportation:** This material is not a dangerous good for international transportation purposes.

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### SECTION 15 – REGULATORY INFORMATION

#### U.S. Federal Regulations:

SARA 311/312 Hazardous Chemicals

Acute: Yes

Chronic: No

Fire: No

Reactive: No

Pressure Release: No

SARA Section 313: No

OSHA Hazard Communication: This product is considered a health hazard.

OSHA Process Safety Standard: No

#### State Regulations

California Proposition 65: not listed.

### SECTION 16 – OTHER INFORMATION

**Disclaimer:** The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the user thereof. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial, and local laws.

**Revision Indicator:** Legal Entity name change 04/01/11