**SAFETY DATA SHEET**

**SECTION 1 • COMPANY AND CHEMICAL IDENTIFICATION**

<table>
<thead>
<tr>
<th>Selective Micro Technologies, LLC</th>
<th>EMERGENCY SOURCE INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>6200 Averay Rd., Suite A</td>
<td>24-Hour Emergency Chemtrec: 800-424-9300</td>
</tr>
<tr>
<td>Dublin, OH 43016</td>
<td>1-800-424-9300</td>
</tr>
</tbody>
</table>

**SECTION 2 • HAZARD IDENTIFICATION**

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Category</th>
<th>CASRN</th>
<th>Range</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry Product</td>
<td>Reactive</td>
<td>7758-19-2</td>
<td>10-50%</td>
<td></td>
</tr>
<tr>
<td>Activated</td>
<td>Reactive</td>
<td>7758-19-2</td>
<td>≤ 5%</td>
<td></td>
</tr>
<tr>
<td>Inert</td>
<td></td>
<td>N/A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Component</th>
<th>CASRN</th>
<th>Range</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activator*</td>
<td>N/A</td>
<td>55-85%</td>
<td></td>
</tr>
<tr>
<td>Sodium Chlorite</td>
<td>7758-19-2</td>
<td>15-40%</td>
<td></td>
</tr>
<tr>
<td>Inert*</td>
<td>N/A</td>
<td>≤ 2%</td>
<td></td>
</tr>
<tr>
<td>Activated Product</td>
<td>CASRN</td>
<td>RANGE</td>
<td></td>
</tr>
<tr>
<td>Chlorine Dioxide</td>
<td>10049-04-4</td>
<td>0.01-0.05%</td>
<td>Depends on product, see label</td>
</tr>
</tbody>
</table>

**SECTION 4 • FIRST AID MEASURES**

**CONTACT WITH LIQUID PRODUCT (ACTIVATED PRODUCT)**

**SKIN:**
- Remove contaminated clothing. Rinse skin immediately. If irritation persists, obtain medical attention.

**EYES:**
- Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing the eye. If irritation persists, obtain medical attention.

**INHALATION:**
- The product produces chlorine dioxide gas when the contents are adequately wetted. Carefully observe label instructions, and Section 8 of this SDS. Remove individual from exposure to chemical. Seek fresh air. If individual is not breathing, administer CPR. If breathing is labored, seek medical attention.

**NOTE:**
- Have the product container or label with you when calling a poison control center or doctor or going for treatment.

**SECTION 5 • FIRE FIGHTING MEASURES**

**FIRE AND EXPLOSION HAZARD:**
- Sodium chlorite in the unactivated product is a strong oxidizer, and can support combustion in the absence of air. Chlorine dioxide, which may evolve from exposure of the unactivated product to water, is explosive in the gas phase at concentrations greater than 10% by volume. Do not allow chlorine dioxide gas to accumulate in confined spaces.

**EXTINGUISHING MEDIA:**
- Fire-exposed containers should be watered and cooled with water fog. Decomposition can release oxygen that supports combustion and reduces effectiveness of suffocation-type extinguishing agents.

**Hazardous Combustion Products:**
- Decomposition can release oxygen that supports combustion and reduces effectiveness of suffocation-type extinguishing agents.

**SECTION 6 • ACCIDENTAL RELEASE MEASURES**

**DRY PRODUCT:**
- If contents of pouch are exposed, spilled, or otherwise introduced into the environment:
  - Wear protective rubber gloves (see manufacturer details for tolerances)
  - Wear protective goggles or other eye protection
  - Wear an approved NIOSH mask to prevent inhaling fumes/dust
  - Place contents on pouch in a plastic container
  - Fill container with water to allow degradation/neutralization

**ACTIVATED PRODUCT:**
- If activated product is spilled, or otherwise introduced into the environment:
  - Wear protective rubber gloves (see manufacturer details for tolerances)
  - Wear protective goggles or other eye protection
  - Wear an approved NIOSH mask to prevent inhaling fumes
  - If spillage is heavily concentrated, dilute
  - Soak up spillage and dispose of according to local ordinance

**SECTION 7 • HANDLING AND STORAGE**

**HANDLING:**
- Use product as directed by label. Avoid breathing mist or vapors generated by activated product. Use only with adequate ventilation. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Thoroughly rinse any protective gear and handling equipment used prior to storage and reuse.

**STORAGE:**
- Observe all applicable regulations when storing this substance. Keep unactivated product in a cool, dry, ventilated area away from direct sunlight. Do not store with acids, chlorine and chlorine compounds, hypochlorites (bleach), organic solvents, sulfur and sulfite compounds, phosphorus, and combustible/flammable materials. Do not store in areas where sparking may occur.

**AFTER EXPOSURE OR INHALATION:**
- After envelope is spent, liquid product should be disposed of down designated disposal sink and flushed thoroughly with water. Throw away envelope. Ensure the micro-reactor used for air treatment or odor elimination is spent before discarding; see product label for total time to be emerged in water prior to discarding.

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

**VENTILATION:**
- General exhaust ventilation is sufficient for safe use of this product. Avoid breathing any vapors, mists or fumes generated by the inactivated and activated product. Local exhaust ventilation or NIOSH-approved mask may be appropriate in applications, in confined spaces or where large quantities are used.

**SECTION 10 • STABILITY AND REACTIVITY**

**ACUTE INHALATION:**
- None normally required when handling intact product. Where overexposure warrants that the format, content or product formulas contained in this document comply with applicable regulations, this document is subject to the conditions of use.

**TARGET ORGANS:**
SECTION 4 • FIRST AID MEASURES

EYE PROTECTION: Whether handling dry ingredients or activated product, approved safety goggles or face shield should be worn.

EMERGENCY WASH FACILITIES: None normally required when handling intact product. Safety shower and chemical eyewash facilities may be necessary if handling large quantities of dry ingredients.

GLOVES: None normally required when handling intact product. If handling exposed dry ingredients in product, use appropriate hand protection. Gloves made of rubber, neoprene or other chemically impervious gloves may be suitable. Consult glove manufacturer.

RESPIRATOR: None normally required when handling intact product. Where overexposure to chlorine dioxide may occur, use appropriate respiratory protection and follow OSHA requirements at 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.

FOR FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS: For firefighting, see section 5.

EXPOSURE LIMITS:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS RN</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>NIOSH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activator</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Sodium Chlorite</td>
<td>7759-19-2</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Inert</td>
<td>15 mg/m3**</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Chlorine dioxide</td>
<td>10049-04-4</td>
<td>0.1 ppm/8hrs</td>
<td>0.1 ppm/10hrs</td>
<td>0.3 ppm STEL</td>
</tr>
</tbody>
</table>

*Time Weighted Average  *Particulates Not Otherwise Regulated

SECTION 8 • Physical and Chemical Properties

APPEARANCE: Dry Product-white powdery substance. Activated Product-light green to yellow liquid. ODOR: Dry Product-NA Activated Product-faint chlorine smell

VAPOR PRESSURE: NA ODOR THRESHOLD: 0.1 ppm VAPOR DENSITY: NA

pH: NA RELATIVE DENSITY: NA


SECTION 10 • Stability and Reactivity

STABILITY: Product is stable under normal storage conditions. Ingredients are oxidizers and may decompose if heated above 160 °C, opened, or wetted.

CONDITIONS TO AVOID: Avoid storing product where it might become wet, or where the spilled contents of a damaged, unactivated pouched could dry to a crystalline salt or produce chlorine dioxide gas. Do not store where dry material may come into contact with sparking.

INCOMPATIBILITIES: Avoid accidental contact of dry ingredients or activated product with acids, chlorine compounds, hypochlorites (bleach), sulfur and sulfite compounds, phosphorus, organic solvents, and combustible/flammable materials.

HAZARDOUS DECOMPOSITION: Exposure of dry ingredients or activated product to acids or chlorine compounds can produce uncontrolled release of chlorine dioxide gas.

SECTION 11 • Toxicology Information

CARCINOGEN STATUS: Not Listed.

TARGET ORGANS: Skin, eyes.

ADDITIONAL DATA: None.

HEALTH EFFECTS OF UNACTIVATED PRODUCT: None anticipated under normal conditions of use. Contact with dry ingredients may cause burns.

INHALATION: None anticipated under normal conditions of use.

SKIN CONTACT: None anticipated under normal conditions of use.

EYE CONTACT: None anticipated under normal conditions of use; however, eye contact with dry ingredients may cause irreversible eye damage.

INGESTION: None anticipated under normal conditions of use.

DERMAL SENSITIZATION: A dermal sensitization test [in accordance with EPA Health Effects Test Guidelines, OPPTS 870.2600 (2003)] was conducted with guinea pigs to determine if the activated product would produce sensitization after repeated topical applications. Based on the results of the study, the activated solution is not considered to be a contact sensitizer.

ACUTE INHALATION: LC50 >2.07mg/L (male and female rats); single exposure acute inhalation of the activated aqueous solution of chlorine dioxide.

SECTION 12 • Ecological Information

Unactivated product should be disposed in accordance with all federal, state and local regulations. Used/activated product sachets are considered inert; consult with appropriate agencies to determine appropriate disposal methods.

SECTION 14 • Transportation Information

D.O.T. Classification: 5.1, packing group II Oxidizer: D.O.T. Identification Number:UN1496; Conforms to 49 CFR 173.4 for road and rail transfer. IATA: Dangerous goods in excepted quantities.

SECTION 15 • Regulatory Information

US Federal Regulations:

Clean Air Act: Not applicable. CERCLA SECTION 103 (40 C.F.R. § 302.4): Not applicable. SARA SECTION 302 (40 C.F.R. § 355.30): Not applicable.


SARA HAZARD CATEGORIES, SARA SECTIONS 311/312 (40 C.F.R. § 370.21): 10,000 lb threshold.

ACUTE HAZARD: Irritant.

CHRONIC HAZARD: None 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.

SECTION 16 • OTHER

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