

## Regen OX – Part A (Oxidizer Complex)

### Material Safety Data Sheet (MSDS)

Last Revised: November 7, 2005

---

#### Section 1 – Supplier Information and Material Identification

---

**Supplier:**



**REGENESIS**

1011 Calle Sombra  
San Clemente, CA 92673  
Telephone: 949.366.8000  
Fax: 949.366.8090  
E-mail: info@regenesis.com

Chemical Description: A mixture of sodium percarbonate [2Na<sub>2</sub>CO<sub>3</sub>·3H<sub>2</sub>O<sub>2</sub>], sodium carbonate [Na<sub>2</sub>CO<sub>3</sub>], sodium silicate and silica gel.

Chemical Family: Inorganic Chemicals

Trade Name: Regen Ox – Part A (Oxidizer Complex)

Product Use: Used to remediate contaminated soil and groundwater (environmental applications)

---

#### Section 2 – Chemical Information/Other Designations

---

<u>CAS No.</u>	<u>Chemical</u>
15630-89-4	Sodium Percarbonate
5968-11-6	Sodium Carbonate Monohydrate
1344-09-8	Silicic Acid, Sodium Salt, Sodium Silicate
63231-67-4	Silica Gel

---

#### Section 3 – Physical Data

---

**Form:** Powder

**Color:** White

**Odor:** Odorless

**Melting Point:** NA

**Boiling Point:** NA

---

**Section 3 – Physical Data (cont)**


---

<b>Flammability/Flash Point:</b>	NA
<b>Vapor Pressure:</b>	NA
<b>Bulk Density:</b>	0.9 – 1.2 g/cm <sup>3</sup>
<b>Solubility:</b>	Min 14.5g/100g water @ 20 °C
<b>Viscosity:</b>	NA
<b>pH (3% solution):</b>	~ 10.5
<b>Decomposition Temperature:</b>	Self-accelerating decomposition with oxygen release starts at 50 °C.

---

**Section 4 – Reactivity Data**


---

<b>Stability:</b>	Stable under normal conditions
<b>Conditions to Avoid/Incompatibility:</b>	Acids, bases, salts of heavy metals, reducing agents, and flammable substances
<b>Hazardous Decomposition Products:</b>	Oxygen. Contamination with many substances will cause decomposition. The rate of decomposition increases with increasing temperature and may be very vigorous with rapid generation of oxygen and steam.

---

**Section 5 – Regulations**


---

<b>TSCA Inventory Listed:</b>	Yes
<b>CERCLA Hazardous Substance (40 CFR Part 302)</b>	
<b>Listed Substance:</b>	<i>No</i>
<b>Unlisted Substance:</b>	<i>Yes</i>
<b>SARA, Title III, Sections 313 (40 CFR Part 372) – Toxic Chemical Release Reporting: Community Right-To-Know</b>	
<b>Extremely Hazardous Substance:</b>	No
<b>WHMIS Classification:</b>	C, D2B
<b>Canadian Domestic Substance List:</b>	Appears

---

---

## Section 6 – Protective Measures, Storage and Handling

---

### Technical Protective Measures

- Storage:** Oxidizer. Store in a cool, well ventilated area away from all sources of ignition and out of the direct sunlight. Store in a dry location away from heat and in temperatures less than 40 °C.
- Keep away from incompatible materials and keep lids tightly closed. Do not store in improperly labeled containers.
- Protect from moisture. Do not store near combustible materials. Keep containers well sealed.
- Store separately from reducing materials. Avoid contamination which may lead to decomposition.
- Handling:** Avoid contact with eyes, skin and clothing. Use with adequate ventilation.
- Do not swallow. Avoid breathing vapors, mists or dust. Do not eat, drink or smoke in the work area.
- Label containers and keep them tightly closed when not in use.
- Wash hands thoroughly after handling.

### Personal Protective Equipment (PPE)

- Engineering Controls:** General room ventilation is required if used indoors. Local exhaust ventilation, process enclosures or other engineering controls may be needed to maintain airborne levels below recommended exposure limits. Avoid creating dust or mists. Maintain adequate ventilation at all times. Do not use in confined areas. Keep levels below recommended exposure limits. To determine actual exposure limits, monitoring should be performed on a routine basis.
- Respiratory Protection:** For many conditions, no respiratory protection is necessary; however, in dusty or unknown conditions or when exposures exceed limit values a NIOSH approved respirator should be used.
- Hand Protection:** Wear chemical resistant gloves (neoprene, rubber, or PVC).

---

### Section 6 – Protective Measures, Storage and Handling (cont)

---

<b>Eye Protection:</b>	Wear chemical safety goggles. A full face shield may be worn in lieu of safety goggles.
<b>Skin Protection:</b>	Try to avoid skin contact with this product. Chemical resistant gloves (neoprene, PVC or rubber) and protective clothing should be worn during use.
<b>Other:</b>	Eye wash station.
<b>Protection Against Fire &amp; Explosion:</b>	Product is non-explosive. In case of fire, evacuate all non-essential personnel, wear protective clothing and a self-contained breathing apparatus, stay upwind of fire, and use water to spray cool fire-exposed containers.

---

### Section 7 – Hazards Identification

---

#### Potential Health Effects

<b>Inhalation:</b>	Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath, and irritations to mucous membranes, nose and throat.
<b>Eye Contact:</b>	Causes irritation, redness and pain.
<b>Skin Contact:</b>	Causes slight irritation.
<b>Ingestion:</b>	May be harmful if swallowed (vomiting and diarrhea).

---

### Section 8 – Measures in Case of Accidents and Fire

---

<b>After Spillage/Leakage:</b>	Eliminate all ignition sources. Evacuate unprotected personnel and never exceed any occupational exposure limit. Shovel or sweep spilt material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to the inventory.
<b>Extinguishing Media:</b>	Water
<b>First Aid</b>	
<b>Eye Contact:</b>	Flush eyes with running water for at least 15 minutes with eyelids held open. Seek a specialist.
<b>Inhalation:</b>	Remove affected person to fresh air. Seek medical attention if the effects persist.
<b>Ingestion:</b>	If the individual is conscious and not convulsing, give two-four cups of water to dilute the chemical and seek medical attention immediately. <b>Do Not</b> induce vomiting.

---

---

**Section 8 – Measures in Case of Accidents and Fire (cont)**

---

**Skin Contact:** Wash affected areas with soap and a mild detergent and large amounts of water.

---

**Section 9 – Accidental Release Measures**

---

**Precautions:**

**Cleanup Methods:** Shovel or sweep spilt material into plastic bags or vented containers for disposal. Do not return spilled or contaminated material to the inventory.

---

**Section 10 – Information on Toxicology**

---

**Toxicity Data**

**LD50 Oral (rat):** 2,400 mg/kg  
**LD50 Dermal (rabbit):** Min 2,000 mg/kg  
**LD50 Inhalation (rat):** Min 4,580 mg/kg

---

**Section 11 – Information on Ecology**

---

**Ecology Data**

**Ecotoxicological Information:** NA

---

**Section 12 – Disposal Considerations**

---

**Waste Disposal Method**

**Waste Treatment:** Dispose of in an approved waste facility operated by an authorized contactor in compliance with local regulations.

**Package (Pail) Treatment:** The empty and clean containers are to be recycled or disposed of in conformity with local regulations.

---

### Section 13 – Shipping/Transport Information

---

<b>D.O.T. Shipping Name:</b>	Oxidizing Solid, N.O.S. [A mixture of sodium percarbonate [2Na <sub>2</sub> CO <sub>3</sub> ·3H <sub>2</sub> O <sub>2</sub> ], sodium carbonate [Na <sub>2</sub> CO <sub>3</sub> ], sodium silicate and silica gel.]
<b>UN Number:</b>	1479
<b>Hazard Class:</b>	5.1
<b>Labels:</b>	5.1 (Oxidizer)
<b>Packaging Group:</b>	III

---

### Section 14 – Other Information

---

<b>HMIS<sup>®</sup> Rating</b>	Health – 1 (slight)	Reactivity – 1 (slight)
	Flammability – 0 (none)	Lab PPE – goggles, gloves, and lab coat

HMIS<sup>®</sup> is a registered trademark of the National Painting and Coating Association.

---

### Section 15 – Further Information

---

**The information contained in this document is the best available to the supplier at the time of writing, but is provided without warranty of any kind. Some possible hazards have been determined by analogy to similar classes of material. The items in this document are subject to change and clarification as more information become available. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose.**