SAFETY DATA SHEET (SDS)

PerCarb®

Section 1: Identification

Product Name: PerCarb®
Recommended Use: Pesticide for commercial use.
Use Restrictions: It is a violation of federal law to use this product in a manner inconsistent with its labeling.
Manufacturer: BioSafe Systems, LLC
Telephone Number: 1-888-273-3088

Section 2: Hazard Identification

GHS Classification

| Oxidizing Solid: Category 2 | Acute Toxicity | Serious Eye Damage/Eye Irritation: Category 1A |

Hazard Statements

H272: May intensify fire; oxidizer.
H302: Harmful if swallowed.
H318: Causes serious eye damage.

Pictograms

Signal Word: DANGER

Precautionary Statements

General

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P103: Read label before use.

Response

P301+P312+P330: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P303+P352: IF ON SKIN: Wash with plenty of water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER/doctor.
P370+P378: In case of fire: Use water to extinguish.

Prevention

P221: Take any precautions to avoid mixing with combustibles.
P264: Wash skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P280: Wear protective gloves, clothing, eye protection, face protection.

Storage / Disposal

P420: Store away from incompatible materials.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3: Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No</th>
<th>% Composition (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate Peroxyhydrate</td>
<td>15630-89-4</td>
<td>85.0%</td>
</tr>
</tbody>
</table>

Section 4: First-Aid Measures

Eye Contact: Hold eye(s) open and rinse cautiously with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye(s). Call a poison control center or doctor for treatment advice.

Skin Contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice if irritation persists.

Ingestion: Call poison control center or doctor immediately for treatment advice. Rinse mouth with water. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation: Move person to fresh air. If person is not breathing, call 911. Call poison control center or doctor for treatment advice.

Notes to Physician: Material is corrosive and probable mucosal damage may contraindicate the use of gastric lavage.
SAFETY DATA SHEET (SDS)
PerCarb®

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Water or water spray.
Unsuitable Extinguishing Media: None.
Combustion Products: Carbon monoxide, carbon dioxide, oxygen.
Unusual Fire and Explosion Hazards: Oxidizing substance, exothermic decomposition releases oxygen, may support combustion.
Protective Equipment for Firefighters: Full chemical protection suits and boots (rubber or PVC) and self-contained breathing apparatus. Cordon the area to keep out all unnecessary personnel. Keep upwind. Use large quantities of water spray to fight fire. Cool containers / tanks with water spray. If safe to do, move product away from fire to secure area. Eliminate all possible sources of ignition and remove flammable material.

Section 6: Accidental Release Measures

Personal Precautions: Work to prevent dust cloud formation. No open flames in area. Wear protective clothing and glasses.
Emergency Procedures: Ensure clean-up is conducted by trained personnel. Personnel should wear appropriate protective equipment. Remove all sources of ignition. If facing concentrations above exposure limits personnel shall wear certified respirators.
Environmental Precautions: Prevent undiluted spillage from entering sewers, basements or watercourses.
Methods and Material for Containment and Clean-Up: Sweep up to prevent slipping hazards. Place spilled material into a suitable container using protective clothing, avoid dust cloud formation. After removing material, clean affected area/surfaces with an excess of water.

Section 7: Handling and Storage

Handling: Avoid creating dust. Keep away from open flames/heat. Keep container closed tightly when not in use. Wear safe clothing and eye protection. Never return unused product to original storage container.
Storage: Keep container closed tightly in storage. Store at temperatures less than 40°C (104°F).
Incompatible Materials: Oxidizing agents (strong acids/bases), metals, organic materials, water/moisture.
Compatible Materials: Stainless Steel, Polyethylene, Paper with PE coating

Section 8: Exposure Controls / Personal Protection

Components with Workplace Control Parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate Peroxyhydrate</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Engineering Controls: Avoid raising dust. Keep away from flames/heat. General room ventilation is required, maintain adequate ventilation. Emergency eye wash station should be in close proximity.
General Hygienic Practices: Do not eat, drink or smoke during use. Wash hands with soap and water after use.
Personal Protection Equipment

Respiratory Protection: For most conditions, no respiratory protection should be needed. For excessive dust condition: dust mask or NIOSH approved particulate respirator.
Eye / Face Protection: Chemical goggles or face shield.
Hand Protection: Chemical resistant gloves.
Skin / Body Protection: Wear suitable protective clothing. Apron and boots made of butyl rubber for high risk exposure.

Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Odor</th>
<th>Odor Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, granular solid.</td>
<td>Odorless</td>
<td>NA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>pH</th>
<th>Specific Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder.</td>
<td>10.4 – 10.6 in 3% solution.</td>
<td>0.9 – 1.2 g/cm³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Melting Point</th>
<th>Freezing Point</th>
<th>Boiling Point</th>
<th>Flammability Limits</th>
<th>Vapor Pressure</th>
<th>Vapor Density</th>
<th>Solubility</th>
<th>Evaporation Rate</th>
<th>Auto-Ignition Temperature</th>
<th>Decomposition Temperature</th>
<th>Relative Density</th>
<th>Partition Coefficient n-octanol / water</th>
<th>Viscosity</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>140 g/L at 20°C (68°F)</td>
<td>NA</td>
<td>NA</td>
<td>SADT &gt; 55°C (131°F)</td>
<td>950-1200 kg/m³</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

Section 10: Stability and Reactivity

Reactivity: Decomposes when moist or when heated. Potential for exothermic hazard.
Stability: Stable under recommended storage conditions.
Conditions to Avoid: Heat/heat sources and moisture.
Hazardous Decomposition Products: Thermal decomposition generates carbon dioxide and oxygen which supports combustion.
### Section 11: Toxicological Information

#### Acute Toxicological Data

<table>
<thead>
<tr>
<th>Condition</th>
<th>Acute Effects</th>
<th>Chronic (Delayed) Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact</td>
<td>Causes serious eye damage.</td>
<td>None.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>May cause skin irritation.</td>
<td>None.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>May cause respiratory tract irritation.</td>
<td>None.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed.</td>
<td>None.</td>
</tr>
</tbody>
</table>

#### Symptoms and Effects

- **Oral LD50**: Rat: 1034 mg/kg
- **Dermal LD50**: Rabbit: >2000 mg/kg
- **Inhalation LC50**: Rat: 1 hr – >4580 mg/m³

### Section 12: Ecological Information

#### Ecotoxicity:

<table>
<thead>
<tr>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>96 hr LC50</td>
<td><em>Pimephales promelas</em> (fathead minnow)</td>
<td>71 mg/L</td>
</tr>
<tr>
<td>48 hr EC50</td>
<td><em>Daphnia pulex</em> (water flea)</td>
<td>4.9 mg/L</td>
</tr>
</tbody>
</table>

#### Persistence and Degradability:

- Biodegrades rapidly into water and oxygen.

#### Bioaccumulative Potential:

- Does not bioaccumulate.

#### Mobility in Soil:

- Non-significant adsorption in soil.

#### Results of PBT & vPvB:

- This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

#### Other Adverse Effects:

- None known.

### Section 13: Disposal Considerations

#### Waste from Residues and Unused Product:

- Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

#### Contaminated Container Disposal:

- Do not reuse or refill containers. Triple rinse empty containers with clean water. Clean and empty containers should be taken to an approved waste handling site for recycling or disposal.

### Section 14: Transport Information

#### UN Number

- DOT 3378
- TDG 3378
- IMDG 3378

#### UN Proper Shipping Name

- Sodium Carbonate Peroxyhydrate

#### Hazard Class (Subsidiary)

- 5.1

#### Packing Group

- II

#### IATA

- Permitted for shipment by air. (25kg)

#### Marine Pollutant

- No

#### Special Precautions:

- PE bags-vented.

#### Shipping Placards:

- OX (Oxidizer)

### Section 15: Regulatory Information

#### TSCA Inventory List

- Sodium Carbonate Peroxyhydrate: Yes

#### US EPA CERCLA Hazardous Substances

- Sodium Carbonate Peroxyhydrate: NA

#### Clean Water Act

- Sodium Carbonate Peroxyhydrate: NA

#### SARA Title III

- **Sec. 302 TPQ.**
  - NA
- **Sec. 304 RQ.**
  - NA
- **Sec 311 / Sec 312 Hazard Category**
  - Physical: Oxidizer, Corrosive
  - Health: Acute Toxicity; Serious Eye Damage or Eye Irritation
- **Sec 313 Clean Air Act Threshold Qty.**
  - NA

#### NFPA 704 Rating

- Health: 2
- Flammability: 0
- Reactivity: 1
- Special: OX (Oxidizer)

#### HMIS Rating

- Health: 2
- Flammability: 0
- Physical: 1
- PPE: Recommended.

#### Uniform Fire Code (NFPA 400)

- Oxidizer, Class 2

**California Prop 65**

- This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm.

**FIFRA**

- This product is a registered pesticide with the United States Environmental Protection Agency and is subject to EPA labeling requirements under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). These requirements may differ from the classification criteria and hazard information required for a safety data sheet under the Global Harmonized Systems (GHS), and for workplace labels of non-pesticide chemicals. It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Always refer to product label for further precautionary information and use directions.
Section 16: Other Information

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

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