1. IDENTIFICATION
Product Name: OxiDate 2.0 ®
Product Type: Bactericide / Fungicide
Manufacturer: BioSafe Systems, LLC
22 Meadow St., East Hartford, CT 06108
Creation Date: 10.2013
EPA Registration No. 70299-12
EPA Establishment No. 067441-L-001

2. HAZARDOUS COMPONENTS
Hydrogen Dioxide……………………………………..7722-84-1
Peroxycetic Acid………………………………………79-21-0

3. HEALTH HAZARDS DATA
Health effects to over exposure to CONCENTRATE:
• Corrosive to mucous membranes, eyes and skin.
• The seriousness of the lesions and the prognosis of intoxication depend directly on the concentration and duration of exposure.
Skin: May cause temporary skin discoloration and irritation.
Eyes: May cause severe eye damage.
If swallowed: Harmful or fatal: Causes chemical burns of mouth, throat and stomach.
• Corrosive to gastrointestinal tract
• Paleness and cyanosis of the face
• Excessive fluid in the mouth and nose
• Bloating of stomach and belching
• Nausea and vomiting
• Risk of chemical pneumonitis and pulmonary edema
If inhaled: Vapors or mist can cause irritation. People with asthma or other lung problems may be more affected.

4. FIRST AID
General Recommendations:
• In case of product splashing in eyes, treat eyes first
• Submerge soiled clothing in water
• Contact physician in all cases
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 eye. Call a poison control center or doctor for treatment advice.
Skin:
• 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 swallowed:
• Call poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
If inhaled:
• Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call poison control center or doctor for treatment advice.
• Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1.800.222.1222 for emergency treatment information.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIRE AND EXPLOSION DATA
Special Fire Hazards: Product (concentrate) can decompose and will release oxygen thereby adding to the fire hazard.
Fire Fighting Methods: Product is not flammable and can be quickly diluted with clean water. Oxidizing Agents may cause spontaneous ignition with oxidizing agents.

6. SPILL OR LEAK PROCEDURES
Cleanup: Rinse small amounts to drain when possible. Dike or contain large spills, pump to containers or soak in inert absorbent. Flush residue to sanitary sewer, rinse area thoroughly with clean water. Avoid materials that are incompatible with concentrate.

Disposal/Storage: Consult state and local authorities for restrictions on disposal of chemical wastes. Unused product (concentrate) is classified as a (D002) by RCRA criteria.

7. HANDLING AND STORAGE
• Never return product back to the original container
• Keep concentrate away from reactive substances
• Prevent contact with organic materials
• Keep product in original container
• Store in cool, ventilated area
• Keep out of direct sunlight
• Never use metal containers or spigots
• Use vented container
• Warn personnel of dangers of concentrated product

8. EXPOSURE CONTROLS / PERSONAL PROTECTION
Respiratory: Avoid breathing mists or vapors of concentrate.
Eyes: Use chemical splash goggles when handling concentrate. For continued severe exposure, wear a face shield over the goggles.
Skin: Rubber gloves - protective or gauntlet type preferred when handling concentrate. Use aprons.

9. PHYSICAL AND CHEMICAL PROPERTIES
Appearance: Clear, colorless liquid
Odor: Pungent
Freezing Point: 30°C (86°F)
Boiling Point: Not applicable, product decomposes
Specific Gravity: 1.10
pH: 0.96
Solubility: Complete
Decomposition Temperature: self-accelerating decomposition temperature > 55°C

10. STABILITY AND REACTIVITY
Stable under normal conditions, with slow oxygen release.

11. TOXICOLOGICAL INFORMATION
Acute Toxicity:
• Acute oral toxicity: LD50, rat 3,622 mg/kg. Test substance: 2% PAA solution
• Acute dermal toxicity: LD50, rabbit, 1040 mg/kg. Test substance: 4.89% PAA, 19.72% H2O2, 10% HOAc solution
• Acute dilutional toxicity: LC50, rat > 3.53 mg/L for four hour exposure. Test substance: 4.5% PAA, 27% H2O2, 4.89% PAA, 19.72% H2O2, 16.7% HOAc solution
• Primary eye irritation: rabbit, severely irritating or corrosive. Test substance: 2% PAA solution
• Primary dermal irritation: rabbit, severe irritant. Test substance: 2% PAA solution

Chronic Toxicity:
• Dermal = >0.12% solution, irritating effect
• Inhalation = > 5 mg/m³, irritant

12. ECOLOGICAL INFORMATION
Toxic to simple cell and aquatic organisms. Danger to the environment limited due to product properties.
• No bioaccumulation
• Soil degradation = 99% in 20 minutes
• Considerable abiotic and biotic degradability
• Sediments = Non-significant adsorption
• Weak persistence of degradation products
• Decomposition products = water & oxygen

13. DISPOSAL CONSIDERATIONS
• Store in original containers in a cool, well-ventilated area, away from direct sunlight. Do not allow product to become overheated in storage. This may cause increased degradation of the product, which will decrease product effectiveness. In case of spill, flood area with large quantities of water. Do not store in a manner where cross-contamination with other pesticides or fertilizers could occur.
• Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Open dumping is prohibited. If wastes cannot be disposed of according to label directions, contact your State Pesticide or Environmental Control Agency, or a Hazardous Waste Representative at the nearest EPA Regional Office for guidance.
• Triple rinse (or equivalent). Then offer for recycling or dispose in a sanitary landfill, or incineration, if allowed by state and local authorities by burning. Stay out of smoke.

14. TRANSPORT INFORMATION
DOT Shipping Name: Hydrogen peroxide and peroxycetic acid mixture stabilized.
UN Number: 3149
Hazard Class: 5.1
Primary Hazard Label: Oxidizer
Subsidiary Risk Label: Corrosive
Packaging Group: II
Shipping Container: UN Certified vented polyethylene.

5.5, 5, 30, 55 and 275 gallon polyethylene drums

15. REGULATORY INFORMATION
TSCA Inventory List: YES
CERCLA Hazardous Substance (40 CFR 302)
Listed substance: NO
Unlisted Substance: YES
Characteristic: Corrosive
Reportable Quantity: Hydrogen Dioxide 1000 lbs., Peroxycetic Acid 500 lbs.
Reporting requirements under CERCLA section 103 for mixtures of hazardous substances (as specified in 40 CFR 302.6(b)) need to be followed.
NPFA Rating Health – 2 Flammability – 0 Reactivity – 3 Special – OXY
HMIS Rating Health – 2 Flammability – 0 Reactivity – 2 PPE - Required
Canadian WHMIS Classification
C – Oxidizing E – Corrosive F – Dangerously Reactive

16. OTHER INFORMATION
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