

SaniDate[®] 12.0

M I C R O B I O C I D E

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION

Product Name: SaniDate[®] 12.0

Product Type: Biocide

Manufacturer: BioSafe Systems LLC,
22 Meadow Street, East Hartford, CT 06108
Office Telephone Number: (860) 290-8890

Emergency: CHEMTREC: 800-424-9300 (24 HOURS EVERY DAY)

Creation Date: 2.2008

NOTE: NOT VALID TWO YEARS AFTER CREATION DATE.

EPA Registration No. 70299-8

EPA Establishment No. 60156-IL-001

2. HAZARDOUS COMPONENTS

Hydrogen Peroxide 7722-84-1

Peroxyacetic Acid 79-21-0

3. HEALTH HAZARDS DATA

Health effects from 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.

Inhalation:

- Severe Irritation of the nose and throat
- spasmodic cough and difficulty in breathing
- Risk of chemical pneumonitis and pulmonary edema
- In case of repeated or prolonged exposure: risk of sore throat, nosebleeds, chronic bronchitis

Eyes:

- Severe eye irritation, watering, redness and swelling of the eyelids
- Burns
- Risk of serious or permanent eye lesions
- Risk of blindness

Skin contact:

- Painful irritation, redness and swelling of the skin
- Risk of severe burns

Ingestion:

- May be fatal if swallowed
- Low probability of risk (stinging odor)
- Paleness and cyanosis of the face
- Severe irritation, burns, perforation of the gastrointestinal tract accompanied by shock
- Excessive fluid in the mouth and nose, with risk of suffocation
- Risk of throat edema and suffocation
- Bloating of stomach, belching
- Nausea and vomiting (bloody)
- Cough and difficulty breathing
- Risk of chemical pneumonitis and pulmonary edema

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 Agent may cause spontaneous ignition with oxidizing agents.

6. SPILL OR LEAK PROCEDURES

- Cleanup: Dike or dam large spills, pump to containers or soak in inert absorbent. Flush residue to sanitary sewer, rinse area thoroughly with clean water. Dilute with large quantities of water.
- Do not return recovered product to the original container.
- Avoid materials that are incompatible with concentrate.
- Waste Disposal: 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

- Operate in a well-ventilated area
- 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 away from heat sources
- Never use metal containers or spigots
- 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.

Skins: Rubber gloves - protective or gauntlet type preferred when handling concentrate. Use aprons.

ACGIH TLV: 1 PPM 8 HOUR TWA 1.4 mg/m³ TWA
OSHA PEL: 1 PPM 8 HOURS TWA 1.4 mg/m³ TWA

- Respiratory protection - NIOSH approved full-face air supplied respirator for excessive conditions
- Hand gloves for handling concentrate = butyl rubber, chemical-resistant
- Eye protection - chemical proof goggles/face shield for splash risk
- Skin protection - coveralls when handling concentrate
- Chemical-resistant slicker suit and boots, if risk of splashing

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid

Odor: Pungent

Freezing Point: -30 C (-22F)

Boiling Point: Not applicable, product decomposes

Specific gravity: (H₂O=1): 1.11

pH: <1 (apparent pH)

Solubility: Complete

Decomposition temperature: self-accelerating decomposition (SADT) with oxygen release starting from 55°C (131°F)

Flashpoint: >212°F (>100°C) (Method: Closed Cup)

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions, with slow oxygen release.

Conditions to avoid: Heat / Sources of heat

Materials to avoid: - Acids - Bases - Reducing Agents - Organic Materials - Metals - Salts of Metals - Flammable Substances

11. TOXICOLOGICAL INFORMATION

Acute Toxicology:

- Oral route, LD50, rat 652 mg/kg. Test substance 12% solution
- Dermal route, LD50 rabbit, 1957 mg/kg. Test substance: 12% solution
- Inhalation, LD50, one hour, rat 590 mg/m³

Irritation:

- Rabbit, serious damage (eyes) Test substance: 4% solution
- Rabbit, corrosive (skin)
- Rat, irritant (respiratory tract) RD50, 22 to 24 mg/m³

Chronic Toxicity:

- Mutagenic effect in vitro but not in vivo
- Oral route, after repeated exposure, rat, no systemic effect
- Dermal route, after repeated exposure, guinea pig, ≥ 0.12% solution, irritating effect
- Inhalation, after single exposure, rat, 5 mg/m³, irritating effect
- No carcinogenic effect.

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
- Degradation products = water & oxygen

Acute Ecotoxicity:

- Fish, *Salmo gairdneri*, LC50, 96 hours > 13 mg/L
- Crustaceans, EC 50, 48 hours 3.3 mg/L
- Bacteria, *Pseudomonas aeruginosa*, EC 100, 5minutes, % 5mg/L

13. DISPOSAL CONSIDERATIONS

• Store in original containers in a cool, well-vented 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 the 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: Organic peroxide, type F, liquid (Peroxyacetic Acid, 12%)

UN Number: 3109

Hazard Class: 5.2(8)

Primary Hazard Label: Oxidizer

Subsidiary Risk Label: Corrosive

Packing Group: II

Shipping Container: UN Certified vented polyethylene. 2.5, 5, 30, 55 and 275 gallon polyethylene drums

Regulatory Information

TSCA Inventory List: YES

CERCLA Hazardous Substance (40 CFR 302)

Listed substance: NO

Unlisted Substance: YES

Characteristic: Corrosive

Reportable Quantity: 100 pounds

NFPA Rating Health - 3 Flammability - 1 Instability - 2 Special - OX

HMIS Rating Health - 3 Flammability - 1 Reactivity - 2 PPE - Required

Canadian WHMIS Classification

C - Oxidizing E - Corrosive F - Dangerously Reactive

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