SAFETY DATA SHEET (SDS)

OxiDate® Canada

Form #:	SDS-101
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Section 1: Identification

Product Name:	OxiDate® Canada	**Product Type / Description:**	Broad-Spectrum Bactericide/Fungicide
Recommended Use:	Bactericide/Fungicide for industrial use.	**Other Means of Identification:**	Peracetic Acid Solution, Peroxyacetic Acid Solution, PAA
Use Restrictions:	It is a violation of federal law to use this product in a manner inconsistent with its labeling.	**Chemical Formula:**	CH_3CO_3H
Manufacturer:	**BioSafe Systems, LLC** **22 Meadow Street | East Hartford, CT 06108**	**PMRA Registration #:**	33469
Telephone Number:	**1-888-273-3088**	**Emergency Number: 1-800-424-9300 (CHEMTREC)**	

Section 2: Hazard Identification

GHS Classification	Hazard Statements
Oxidizing Liquid: Category 2 Corrosive to Metals: Category 1 Acute Toxicity Oral: Category 4 Dermal: Category 4 Inhalation: Category 4 Skin Corrosion/Irritation: Category 1A Serious Eye Damage/Eye Irritation: Category 1	H272: May intensify fire; oxidizer. H290: May be corrosive to metals. H302: Harmful if swallowed. H312: Harmful in contact with skin. H314: Causes severe skin burns and eye damage. H318: Causes serious eye damage. H332: Harmful if inhaled. H335: May cause respiratory irritation.

Pictograms	Signal Word
	**DANGER**

Precautionary Statements

General	Response
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.	P301+P330+P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304+P340: IF INHALED: Move person to fresh air and keep comfortable for breathing. 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. P321: For specific treatments see FIRST AID section on SDS or label. P363: Wash contaminated clothing before reuse. P370+P378: In case of fire: Use water or other suitable extinguishing media. P390: Absorb spillage to prevent material damage.
Prevention	**Storage / Disposal**
P210: Keep away from heat, sparks or open flames, no smoking. P220: Keep away from combustible materials. P221: Take any precautions to avoid mixing with combustibles. P234: Keep only in original container. P260: Do not breathe fumes, mist or vapors. P262: Do not get in eyes, on skin or on clothing. P264: Wash thoroughly after handling. P270: Do not eat, drink, or smoke when using this product. P271: Use only outdoors or in a well-ventilated area. P273: Avoid release to the environment. P280: Wear protective gloves, clothing, eye protection, face protection.	P405: Store locked up. P406: Store in corrosive resistant container, never use metal containers. P410: Protect from sunlight. P411: Store at temperatures not exceeding 55°C (131°F). 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

Components	CAS-No	% Composition (w/w)
Hydrogen Peroxide	7722-84-1	27,0%
Peroxyacetic Acid	79-21-0	2,5%
Acetic Acid	64-19-7	5,0%

Section 4: First-Aid Measures

Eye Contact:	In case of eye contact, remove contact lenses and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. See a medical doctor immediately.
Skin Contact:	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Seek immediate medical attention/advice.
Ingestion:	Rinse mouth with water. Never give anything by mouth to an unconscious person. Call a physician immediately. If swallowed, do not induce vomiting - seek medical advice.
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration. Consult a physician if necessary.
Notes to Physician:	This product can be corrosive to skin, eyes, and mucous membranes. Careful gastric lavage should be considered. Observations may be warranted. Treatment is controlled removal of exposure followed by supportive care.

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media:	Water spray.
Unsuitable Extinguishing Media:	Carbon dioxide, alcohol foam, dry chemical. Heavy water stream can spread fire.
Combustion Products:	Corrosive vapors, acetic acid, carbon oxides.
Unusual Fire and Explosion Hazards:	Product is not flammable but during a fire, product can decompose and generate oxygen which can initiate or promote 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:	Ensure adequate ventilation. Avoid inhalation, ingestion and contact with skin and eyes.
Emergency Procedures:	Ensure clean-up is conducted by trained personnel. Personnel should wear appropriate protective equipment. Remove all sources of ignition. Keep people away from and upwind of spill/leak. 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:	Dike to collect large liquid spills. Contain spills with earth or sand or inert absorbent. Stop leak and contain spill if this can be done safely. Dilute with large quantities of water. If safe to do so, move product to secure area. Control runoff and isolate discharged material for proper disposal. Do not seal waste material, do not use textiles, tissues, saw dust or combustible materials to clean the spill. Do not return product to the original storage container/tank due to risk of decomposition.

Section 7: Handling and Storage

Handling:	Wear protective gloves/eye protection/face protection/body, skin protection. Do not eat, drink, or smoke when using this product. Wash thoroughly after handling. Avoid breathing fumes/mist/vapors. Use only outdoors or in a well-ventilated area.
Storage:	Store in cool, ventilated area. Keep away from heat. Keep only in original container. Protect from sunlight. Store at temperatures not exceeding 30°C (86°F) for product quality. Do not store near combustible materials.
Incompatible Materials:	Oxidizing agents, strong reducing agents, combustible materials, heavy metals.

Section 8: Exposure Controls / Personal Protection

Components with Workplace Control Parameters

Component	ACGIH	NIOSH	OSHA
Acetic Acid	TWA: 10 ppm STEL: 15 ppm	TWA: 25 mg/m³ - 8 hrs. TWA: 10 ppm - 8 hrs. IDLH: 50 ppm	TWA: 25 mg/m³ - 8 hrs. TWA: 10 ppm - 8 hrs.
Hydrogen Peroxide	TWA: 1 ppm	TWA: 1,4 mg/m³ - 8 hrs. TWA: 1 ppm - 8 hrs. IDLH: 75 ppm	TWA: 1,4 mg/m³ - 8 hrs. TWA: 1 ppm - 8 hrs.
Peracetic Acid	STEL: 0,4 ppm		

Engineering Controls:	Ensure adequate ventilation. Emergency eye wash stations / emergency showers should be available in the immediate vicinity of any potential exposure.
General Hygienic Practices:	Do not eat, drink or smoke during use. Wash hands immediately after handling the product.

Personal Protective Equipment	
Respiratory Protection:	Use an approved air-purifying or supplied air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits. Recommended respirators are those with an organic vapor / acid gas cartridge.
Eye / Face Protection:	Chemical resistant goggles or face shield if splashes are expected to occur.
Hand Protection:	Rubber/latex/neoprene or other suitable chemical resistant gloves. Do not use leather or cotton gloves.
Skin / Body Protection:	Wear non-combustible clothing and footwear (PVC, neoprene, nitrile or natural rubber).

Section 9: Physical and Chemical Properties

Physical State:	Liquid.	**Colour:**	Clear.	**Odour:**	Pungent, vinegar like.
Melting Point / Freezing Point:	-30°C (-22°F)	**Boiling Point:**	NA	**Flammability:**	NA
Flammability Limits:	NA	**Flash Point:**	NA	**Auto-Ignition Temperature:**	NA
Decomposition Temperature:	> 55°C (131°F)	**pH:**	<1,5	**Kinematic Viscosity:**	NA
Solubility:	Complete.	**Partition Coefficient n-octanol / water:**	NA	**Vapor Pressure:**	22 mm Hg (25°C)
Relative Density:	NA	**Vapor Density:**	NA	**Particle Characteristics:**	NA

Section 10: Stability and Reactivity

Reactivity:	Reactive and oxidizing agent, organic peroxide.
Stability:	Stable under recommended storage conditions.
Conditions to Avoid:	Open flames/heat sources, temperatures above 55°C (131°F), direct sunlight, combustible materials.
Incompatible Materials:	Acids, bases, reducing agents, organic materials, soft metals, salts of metals.
Hazardous Decomposition Products:	Thermal decomposition generates corrosive vapors, acetic acid and oxygen which supports combustion.

Section 11: Toxicological Information

Acute Toxicological Data

Oral LD50 Rat:	3622 mg/kg	**Dermal LD50 Rat:**	1040 mg/kg	**Inhalation LC50 Rat:**	4 hr – 5350 mg/m^3

Symptoms and Effects

Condition	Acute Effects	Chronic (Delayed) Effects
Eye Contact:	Causes serious eye damage.	None.
Skin Contact:	Causes severe skin burns.	None.
Inhalation:	May cause respiratory tract irritation.	None.
Ingestion:	Probable mucosal damage.	None.

Section 12: Ecological Information

	Duration	Species	Value
Ecotoxicity:	48 hr LC50	*Oncorhynchus mykiss* (rainbow trout)	>40 mg/L
	48 hr EC50	*Crangon crangon*	126.8 mg/L

Persistence and Degradability:	Peracetic acid is completely miscible with water. Product is biodegradable due to chemical properties.
Bioaccumulative Potential:	Does not bioaccumulate.
Mobility in Soil:	Non-significant adsorption soil degradation, >99% in 20 minutes.
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	UN Proper Shipping Name	Hazard Class (Subsidiary)	Packing Group	IATA	Marine Pollutant
TDG	3149	Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water, and not more than 5 percent peroxyacetic acid	5.1 (8)	II	Not permitted for shipment by air.	
IMDG	3149	Hydrogen peroxide and peroxyacetic acid mixtures, stabilized with acids, water, and not more than 5 percent peroxyacetic acid	5.1 (8)			No

Special Precautions: Shipping container: UN certified vented polyethylene

Section 15: Regulatory Information

DSL Inventory List		PMRA
Acetic Acid	Yes	This product is a pesticide registered by the Canadian Pest Management Regulatory Agency and is subject to the PMRA's labeling requirements under the Pest Control Products Act. These requirements may differ from the classification criteria and hazard information required for a Safety Data Sheet under the Globally Harmonized System (GHS), and for workplace labels of non-pesticide chemicals. Use of this product in a way that is inconsistent with its labeling is an offense under federal law. Always refer to the product label for other instructions and precautions.
Hydrogen Peroxide	Yes	
Peracetic Acid	Yes	

Environmental Emergencies

Component	Canada - Environmental Emergencies - Part 1 Substances - Substances Likely to Explode - Minimum Threshold Quantities	Canada - Environmental Emergencies - Part 1 Substances - Substances Likely to Explode - Minimum Mixture Concentrations	Canada - Environmental Emergencies - Part 2 Substances - Substances Hazardous When Inhaled - Minimum Threshold Quantities	Canada - Environmental Emergencies - Part 2 Substances - Substances Hazardous When Inhaled - Minimum Mixture Concentrations
Acetic Acid	NA	NA	6,8 tonnes min qty	95
Hydrogen Peroxide	NA	NA	4,5 tonnes min qty	10
Peracetic Acid	3,4 tonnes min qty	52	NA	NA

Canadian National Pollutant Release Inventory

Acetic Acid	Part 4 Substance
Hydrogen Peroxide	NA
Peracetic Acid	Part 1, Group A Substance

Section 16: Other Information

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

To the extent of our knowledge, the information herein is accurate as of the date of this document. However, neither BioSafe Systems nor any of its affiliates make any warranty, expressed or implied, or accept any liability relating to the information or its use. The information is for use by technically skilled persons at their own discretion and risk. This is not a license or a patent. The user alone must finally determine suitability of any information or material for any contemplated use, the manner or use and whether any patents are infringed. Always read and follow label directions.

For additional information, call us toll-free at 1.888.273.3088 or visit www.biosafesystems.com

BioSafe Systems

NFPA 704 Rating	**Health:**	**2**	**Flammability:**	**0**	**Reactivity:**	**1**	**Special:**	OX (Oxidizer)
HMIS Rating	**Health:**	**2**	**Flammability:**	**0**	**Physical:**	**2**	**PPE:**	Recommended. (C)

PPE: