your partner in food safety

SDS
Safety Data Sheet

1) **Product Identification**

Product Name: Birk-Ox

Product Code: I02470

Recommended Use: Excellent post-rinse sanitizer for all previously cleaned surfaces.

Producer: Birko Corporation
9152 Yosemite Street
Henderson, CO 80640-8027

Contact Information: (303) 289-1090 or 1-800-525-0476

Emergency Number: CHEMTREC 1-800-424-9300

2) **Hazard(s) Identification**

Health	Environmental	Physical
Acute Toxicity Cat. 4 (oral) Skin Corrosion Cat. 1B Eye Effects Cat. 1	Aquatic Toxicity Acute Cat. 2 Chronic Cat. 2	Corrosive Cat. 1 Oxidizing Liquid Cat. 1

Labeling:

Symbol:

Signal Word: Danger
Oxidizer, Corrosive, Irritant, Aquatic Toxicity

Hazard Statement(s): Causes irreversible eye damage. Harmful or fatal if swallowed. Causes burns. Do not get into eyes, on skin, or on clothing. Do not use around open flames or sparks. Avoid contact with organic materials ie., oily rags, wood, clothing. May spontaneously combust.

Precautionary Statement(s): Use rubber gloves, protective splash-proof goggles, and protective clothing. Remove contaminated clothing and wash before re-use. Do not contaminate food, feed, or water. Keep container closed when not in use.

3) Composition/ Information on Ingredients

Name(s)	Synonym(s)	CAS Number	Weight %
Peroxyacetic Acid	Peracetic Acid	79-21-0	5-6%
Hydrogen Peroxide	Dioxidane	7722-84-1	25-27.5%
Acetic Acid		64-19-7	5-10%

4) First-Aid Measures

Inhalation	Skin Contact	Eye Contact	Ingestion
Possible discomfort: severe irritation of mucous lining (nose, throat, eyes), cough, sneezing, flow of tears. Move victims into fresh air. If breathing difficulties occur (e.g. severe continual coughing): keep patient half sitting with upper body raised. Keep patient warm and at rest. Consult a physician immediately.	After contact with skin, wash immediately with plenty of water. Take off all contaminated clothing immediately. Consult a physician. Immediately rinse contaminated or saturated clothing with water.	With eye held open, thoroughly rinse immediately with plenty of water for a least 10 minutes. Continue rinsing process with eye rinsing solution. Protect unharmed eye. Call ambulance. (Cue: caustic burn of the eyes) Immediate further treatment in ophthalmic hospital/ ophthalmologist. Continue rinsing eye until arrival at ophthalmic hospital.	Do not induce vomiting. Danger of penetration of the lungs (danger to breathing) when swallowed or vomited, due to gas evolution and foam formation. Only when patient fully conscious: have the mouth rinsed with water. Have patient drink plenty of water in small sips. Keep patient warm and at rest. Notify ambulance immediately.

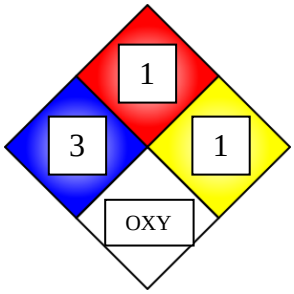
5) Firefighting Measures

Suitable Extinguishing Media: Water, Carbon Dioxide, Dry Chemical, and Foam Blanket

Unsuitable Extinguishing Media: N/A

Specific Hazards: Always wear self-contained breathing apparatus when fighting a chemical fire.

Special Protective Actions for Fire-Fighters: Oxygen released. This product will support, or accelerate, or even initiate the combustion process, when in concentrated contact with combustible material.



6) Accidental Release Measures

Personal Precautions: Be sure to use all necessary Personal Protective Equipment. Evacuate all unprotected personal to safe area.

Environmental Precautions: Avoid contamination of food, feed, sewers, waterway, or groundwater.

Methods and Materials for Containment and Clean-Up: Always approach spills from upwind. Small Spills: may be flushed to an approved sewer line with generous amounts of water. Large Spills: Spill may be neutralized with soda ash (sodium carbonate) broadcasted on surface. Use 1 to 1.5 lbs. of soda ash for each gallon of spilled material. The resultant neutralized product will become carbon dioxide and water. Flush material with water and collect for disposal into plastic container. A flush to sewer may be allowed if approved by local authority. Dispose of in accordance with federal, state, provincial, or local laws. Combustible materials should be removed and/or rinsed with water to ensure all residual hydrogen peroxide is removed to the extent possible.

7) Handling and Storage

Precautions for Safe Handling: Do not contaminate food, feed, or natural water. Supplier is not responsible for disposition of this product. Do not reuse container. Maintain an eyewash station, and safety shower in product handling areas. Do not store near reducing agents, fuels, organic material, or other non-compatible materials.

Conditions for Safe Storage: Keep container closed when not in use. Store in a cool, dry, and well-ventilated location. Keep away from heat and incompatible materials.

8) Exposure Controls and Personal Protection

Appropriate Engineering Controls: Ventilation: Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

Exposure Limits:

Name (CAS-No.)	PEL	TWA	Ceiling	STEL
Acetic Acid (64-19-7)	10 ppm	N/A	N/A	15 ppm
Peroxyacetic Acid	N/A	N/A	N/A	N/A
Hydrogen Peroxide (7722-84-1)	1.4 mg/m3 OSHA	1.4 mg/m3 OSHA 1 ppm ACGIH	N/A	N/A

Personal Protective Equipment

Eye/Face	Skin	Gloves	Boots
 			

Eye/Face: Safety glasses with Side shields. Wear chemical safety goggles with face shield when appropriate.

Skin: Wear chemical resistant clothing and rubber boots.

Gloves: Wear appropriate chemical resistant gloves.

Respiratory: Use only when concentrations exceed exposure limits. If limits are exceeded a NIOSH approved respirator is required. If eye irritation occurs use a full face style mask. When vapor concentrations are above 10 ppm or in a spill emergency a NIOSH approved self-contained breathing apparatus or airline respirator, with full-face piece is required. If respirators are warranted in the workplace a respiratory protection programs must meet 29 CFR 1910.134, and be followed.

Protective Material Types: Butyl rubber, natural rubber, neoprene, nitrile, polyvinyl chloride (PVC), Gore Tex, or Tyvek (R)

9) Physical and Chemical Properties

Physical Form: Liquid

Appearance: Colorless

Odor: Sharp, pungent, vinegar-like

pH: (1% solution) 2.5

Melting Point: Not available

Freezing Point: -14.6°F

Boiling Point: Decomposes

Flash Point: >200 F (closed cup)

Evaporation Rate: > 1

Flammability: Not flammable

Upper/Lower Flammability or explosive limits: Not applicable

Vapor Pressure: 22mm@25°C

Vapor Density: > 1

Relative Density: Not available

Specific Gravity: 1.10

Solubility: 100%

Partition coefficient: Not available

Auto-Ignition Temperature: 270 C

Decomposition Temperature: Not available

10) Stability and Reactivity

Chemical Stability: Oxidizing agent. Stable under normal storage conditions.

Possibility of Hazardous Reactions: Danger of decomposition if exposed to heat, other products, impurities, catalysts, metallic salts, or alkalis.

Conditions to Avoid: Sun rays, heat, open flames, and heat effect.

Materials to Avoid: Impurities, decomposition catalysts, metals, metallic salts, alkalis, hydrochloric acid, reducing agents, flammable substances, and organic solvents.

Hazardous Decomposition Products: Oxygen released. This product will support, or accelerate, or even initiate the combustion process, when in concentrated contact with combustible material.

11) Toxicological Information

Acute Toxicity:

Test	Results	Basis
Oral LD50 (Rat)	500-3310 mg/kg	Similar Products
Dermal LD50 (Rabbit)	1060 gm/kg	Similar Products

Summary Comments: Effect on skin: Causes caustic burns. Effects on eyes: Extreme irritation up to cauterization. Can cause severe conjunctivitis cornea damage or irreversible eye damage. Symptoms may occur with delay. Effect when swallowed: Swallowing can lead to bleeding of the mucosa in the mouth, esophagus and stomach. The rapid releasing of oxygen can cause distension and bleeding of the mucosa in the stomach and lead to severe damage of the internal organs, especially in the event of greater intake of the product. Effect when inhaled: Inhalation of vapor/aerosols can lead to irritation of the respiratory tract and cause inflammation of the respiratory tract and pulmonary oedema. Symptoms may occur with delay.

Sub-chronic/Chronic Toxicity:

Test	Results	Comments
N/A	**N/A**	**N/A**

Summary Comments: None

12) Ecological Information

Toxicity:

Test	Results
LC50 Bluegill Sunfish	1.21 ppm
LC50 Topmelt	2.8 ppm

Persistence and Degradability: Increased acidity in water may cause harm to aquatic organisms.

Bioaccumulative Potential: This material is believed not to bioaccumulate.

Mobility in Soil: Readily biodegradable. The following substances are formed: oxygen and water

Other Adverse Effects: Not established

13) Disposal Considerations

Disposal Method: Dispose in accordance with all applicable regulations. Subject to disposal regulations: U.S. EPA 40 CFR 262. Hazardous Waste Number(s): D002

14) Transport Information

UN Number: UN 3098

UN Proper Shipping Name: Oxidizing liquid, corrosive, n.o.s. (contains hydrogen peroxide and peroxyacetic acid mixture, stabilized)

Transport Hazard Class (es): 5.1, 8

Packing Group: II

Environmental Hazard(s): N/A

Special Precautions for User: Extreme oxidizing product. Handle with extreme care.

15) Regulatory Information

US Regulations:

CERCLA Sections 102a/103 Hazardous substances (40 CFR 302.4):

Acetic Acid: 5,000 lbs. 100% active basis

Section 302 (EHS):

Peracetic Acid: 500 lbs. TPQ 100% active basis

Section 304 (EHS):

Peracetic Acid: 500 lbs. RQ 100% active basis

CAA Section 112(r):

Peracetic Acid: 10,000 lbs TQ 100% active basis

SARA Title III SARA Sections 311/312 Hazardous Categories (40 CFR 370.21):

Acute: Yes

Chronic: No

Fire: No

Reactive: Yes

Sudden Release: No

State Regulations:

California Proposition 65: This product is not listed

California Hazardous Substance List:

Hydrogen Peroxide	7722-84-1
Acetic Acid	64-19-7

New Jersey Hazardous Substance List:

Peroxyacetic Acid	79-21-0
Hydrogen Peroxide	7722-84-1
Acetic Acid	64-19-7

Pennsylvania Hazardous Substance List:

Hydrogen Peroxide	7722-84-1

Canadian Regulations:

Controlled Products Regulations (CPR): This product has been classified in accordance with the criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the CPR.

WHMIS Classification: D2B, E, and C

National Inventory Status: U.S. Inventory (TSCA): All the components of this substance are listed on or exempt from the inventory.

Canada Inventory (DSL/NDSL): All components of this product are listed on the DSL

16) Other Information

HMIS

1	**FLAMMABILITY**
2	**HEALTH**
2	**REACTIVITY**
H	**Personal Protection**

Hazard Index

4-Severe

3-Serious

2-Moderate

1-Slight

0-Minimal

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