

Material Safety Data Sheet

SeaKlear: Stain Klear

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer's Name: HaloSource, Inc.
Corporate Address: 1631 220th St. SE, Suite 100, Bothell, WA 98021
Manufacturer's Telephone: (425) 881-6464 (Monday-Friday, 8AM-5PM PDT)
Emergency Telephone: **800-424-9300 Chemtrec** (24 Hours)
Material/Trade/Product Name: **SeaKlear: Stain Klear**
Synonyms: Ethanedioic Acid, Dihydrate
Chemical Name: Oxalic Acid, Dihydrate
Chemical Formula: C₂H₂O₄ · 2H₂O
CAS No.: 6153-56-6
EPA Re. No.: Not applicable
Product Use: Stain Remover for swimming pools.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

CAS NO.	COMPONENT	%	OSHA HAZARDOUS?
6153-56-6	Oxalic Acid, Dihydrate	99 – 100	Yes

NOTE: See Section 8 for permissible exposure limits.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Odorless, colorless, transparent crystalline.

WARNING! May be fatal if swallowed or inhaled. Can cause burns of the eyes and skin. Avoid breathing dusts. Can cause permanent damage of the eyes. Can cause severe irritation of the respiratory system.

POTENTIAL HEALTH EFFECTS

EYE: Eye contact will cause severe irritation, pain, reddening, and possibly damage to the cornea. Depending on the duration of eye contact, damage to the cornea may be irreversible.

SKIN: Repeated or prolonged skin exposure can cause dermatitis and slow healing ulcers. Excessive contact may produce a delayed localized pain and discoloration of the skin with fingernails becoming brittle and blue with possible gangrenous ulcerations of the skin. Oxalic Acid may be absorbed via intact skin.

INGESTION: May irritate and cause burns of the mouth and throat. Symptoms may include burning pain of the mouth and throat. Symptoms may include burning pain of the mouth, throat and stomach followed by profuse vomiting. Small doses may cause headache, pain and twitching in muscles and cramps, while larger doses can cause weak and irregular heartbeat, drop in blood pressure and signs of heart failure. The fatal adult human dose is estimated to be 5 grams (0.18 oz.) A delayed effect of ingestion is kidney damage, possibly leading to renal failure.

INHALATION: Irritating to the nose, throat and respiratory tract with symptoms of sore throat, coughing and difficulty breathing. May cause inflammation of the respiratory tract.

CHRONIC EXPOSURE/CARCINOGENICITY: Chronic skin absorption of oxalic acid can lead to formation of kidney and urinary tract stones. Chronic inhalation of this product can result in the formation of kidney and urinary tract stones.

AGGRAVATION OF PRE-EXISTING CONDITIONS: None known.

POTENTIAL ENVIRONMENTAL EFFECTS: Non known.

SECTION 4: FIRST AID MEASURES

FIRST AID PROCEDURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if any adverse effect occurs.

SKIN: Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

INGESTION: Do not induce vomiting. Have victim rinse mouth thoroughly with water, if conscious. Never give anything by mouth to an unconscious person or one who is having convulsions. Contact a physician or poison control center immediately.

INHALATION: Remove victim to fresh air. Apply artificial respiration if victim is not breathing. Do not use mouth-to-mouth method if victim ingested or inhaled substance; but induce artificial respiration with the aid of a mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Get immediate medical attention.

NOTE TO PHYSICIANS: Provide general supportive measures and treat symptomatically. Treatment should be rapidly instituted by giving a dilute solution of calcium lactate, lime water, finely pulverized chalk, plaster, and/or milk to supply large amounts of calcium to inactivate oxalate by forming an insoluble calcium salt in the stomach. Gastric lavage is controversial, since this may compound an already severe corrosive lesion in the esophagus or stomach. However, if used, gastric lavage should be done with limewater (calcium hydroxide). Intravenous gluconate or calcium chloride solutions should be given to prevent hypocalcemic tetany; in severe cases, parathyroid extract has also been given. Additionally, acute renal failure should be anticipated, and careful fluid management is necessary. Metabolically its toxicity is believed to be due to the capacity of oxalic acid to immobilize calcium and thus upset the calcium-potassium ratio in critical tissues. Effective therapy against burns from oxalic acid involved replacement of calcium.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: Not available

UPPER FLAMMABLE LIMIT: Not available

FLAMMABILITY CLASS (OSHA): Not applicable

AUTOIGNITION TEMPERATURE: Not available

LOWER FLAMMABLE LIMIT: Not available

FLAME PROPAGATION/BURNING RATE: Not available

UNIQUE FIRE PROPERTIES: This product is a combustible solid, but must be substantially preheated before it ignites. This product is corrosive and presents a severe inhalation and contact hazard to firefighters.

HAZARDOUS COMBUSTION PRODUCTS: When involved in a fire, this material may decompose and produce irritating and toxic gases (e.g. carbon monoxide, carbon dioxide and formic acid.) Finely divided dusts of this material may cause a hazard of an air/dust explosion.

EXTINGUISHING MEDIA: Use Water spray, dry chemical, alcohol resistant foam, or carbon dioxide. Reduce dusts with water spray.

PROTECTION OF FIREFIGHTERS: Provide firefighters with self-contained breathing apparatus in positive pressure mode and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: See Section 8 (Personal Protective Equipment).

ENVIRONMENTAL PRECAUTIONS: Prevent spill rinsate from contamination of storm drains, sewers, soil or groundwater.

METHODS FOR CLEANING UP:

SMALL SPILL: Stop the flow of material. Contain the discharged material. If sweeping of area is necessary, use a dust suppressant agent which does not react with product.

LARGE SPILL: Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering. Keep materials which can burn away from spilled materials.

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING RECOMMENDATIONS

VENTILATION: Use with adequate ventilation.

FIRE PREVENTION: See Section 5.

SPECIAL HANDLING REQUIREMENTS: Avoid bodily contact. Wash hands thoroughly after handling.

SAFE STORAGE RECOMMENDATIONS

CONTAINMENT: Keep container closed when not in use.

STORAGE ROOM RECOMMENDATIONS: Keep in a well-ventilated room away from incompatible materials.

INCOMPATIBLE MATERIALS: Strong alkalines, strong oxidizers, chlorites and hypochlorites, and combustible materials. In contact with iron and iron compounds, this product may react rapidly to form ferric oxalate. Contact with silver may form explosive silver oxalate. Oxalic acid dihydrate solutions are corrosive to metals.

STORAGE CONDITIONS: Use corrosion resistant materials in storage area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limits.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

EYE/FACE PROTECTION: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN PROTECTION: Impervious clothing to prevent skin contact.

HAND PROTECTION: Impervious gloves.

RESPIRATORY PROTECTION: Use a dust mask/respirator. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

GOOD HYGIENE/WORK PRACTICES: Always follow good hygiene/work practices by avoiding vapors or mists and contact with eyes and skin. Thoroughly wash hands after handling and before eating or drinking. Always wear the appropriate PPE when repairing or performing maintenance on contaminated equipment.

EXPOSURE GUIDELINES

PERMISSIBLE EXPOSURE LIMITS						
INGREDIENT CAS NO.	OSHA		WISHA		ACGIH (TLV)	
	TWA	STEL	TWA	STEL	TWA	STEL
144-62-7*	1 mg/m ³	None	1 mg/m ³	None	1 mg/m ³	2 mg/m ³

* Component of oxalic acid dihydrate is oxalic acid 144-62-7. Exposure limits listed are for oxalic acid.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

COLOR: Colorless, transparent

PHYSICAL FORM: Solid

pH: 1.3 (in 0.1m solution)

VAPOR DENSITY: 4.3

MELTING POINT: Not available

SOLUBILITY IN WATER: Freely soluble

SHAPE: Crystalline

ODOR: Odorless

VAPOR PRESSURE: < 0.001 mmHg at 20°C

BOILING POINT: Not available

FREEZING POINT: Not available

SPECIFIC GRAVITY OR DENSITY: 1.650

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Values should not be construed as a guaranteed analysis of any specific lot or as specifications.

SECTION 10: STABILITY AND REACTIVITY

CHEMICAL STABILITY: Normally stable. If heated to melting point, sublimation and decomposition occurs.

CONDITIONS TO AVOID: Avoid high temperatures and ignition sources.

MATERIALS TO AVOID (INCOMPATIBILITY): Strong alkalines, strong oxidizers, chlorites and hypochlorites, and combustible materials. In contact with iron and iron compounds, this product may react rapidly to form ferric oxalate. Contact with silver may form explosive silver oxalate. Oxalic acid dihydrate solutions are corrosive to metals.

HAZARDOUS DECOMPOSITION PRODUCTS: Upon heating, water, carbon monoxide, carbon dioxide and formic acid are released.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

ORAL LD₅₀ (rat): 7500 mg/kg

DERMAL LD₅₀ (rabbit): 500 nig/24 hrs - mild irritation

INHALATION LC₅₀ (rabbit): Not available.

SKIN IRRITATION (rabbit): 500 nig/24 hrs - mild irritation

EYE IRRITATION (rabbit):

- Eye - (Rabbit, adult) 25 mg/24 hrs - severe irritation
- Eye - (Rabbit, adult) 100 mg/4 seconds - severe irritation

SKIN SENSITIZATION (guinea pig): Not known

ADDITIONAL INFORMATION: Intraperitoneal LD50 270 mg/kg (mouse)

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: Not available.

MOBILITY: Not available.

PERSISTENCE AND DEGRADABILITY: Not available.

BIOACCUMULATIVE POTENTIAL: Not available.

ADDITIONAL INFORMATION: Biodegrades at moderate rate. Product is essentially non-volatile in water. May react slowly in water with photo chemically produced OH radicals, but expected to be removed rapidly from surface water by direct photolysis. Not expected to bioconcentrate significantly in aquatic organisms.

SECTION 13: DISPOSAL CONSIDERATIONS

If this product as supplied becomes a waste, it does meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Please be advised that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

NOTE: Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate or otherwise inappropriate.

SECTION 14: TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT):

Proper Shipping Name:

Not Regulated

Hazard Class: Not Regulated
 Identification Number (UN Number): Not Regulated
 Packing Group (PG): Not Regulated

SECTION 15: REGULATORY INFORMATION

TSCA STATUS: Not Listed

CERCLA REPORTABLE QUANTITY (RQ):

CHEMICAL NAME	RQ
Not applicable	Not applicable

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (EHS):

CHEMICAL NAME	TPQ	RQ
Not applicable	Not applicable	Not applicable

SARA TITLE III SECTION 311/312 HAZARD CATEGORIES: Does this product/material meet the definition of the following hazard classes according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of SARA Title III?

ACUTE HEALTH HAZARD	CHRONIC HEALTH HAZARD	FIRE HAZARD	REACTIVE HAZARD	SUDDEN RELEASE OF PRESSURE
YES	YES	NO	NO	NO

SARA TITLE III SECTION 313 TOXIC CHEMICALS INFORMATION:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

CALIFORNIA PROPOSITION 65: The following chemical(s) is/are known to the state of California to cause cancer or reproductive toxicity:

CHEMICAL NAME	CAS NO.	CONCENTRATION (%)
Not applicable	Not applicable	Not applicable

SECTION 16: OTHER INFORMATION

REVISION INFORMATION:

MSDS sections(s) changed since last revision of document: All references to corrosivity have been removed from throughout entire MSDS.

DISCLAIMER:

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