



SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier:

Envirox H2Orange2 Concentrate 117 (**Concentrate & Dilutions**)
(Note: The Concentrated Disinfectant and Dilution specific relevant information is marked in each Section of the SDS)

Product Number: 117 (and In-Use Dilutions)

EPA Number: 69268-2

Recommended use of the chemical and restrictions on use:
Oxidizing Multipurpose Cleaner, Degreaser and Sanitizer (Non-

-Food Contact Surfaces), Virucide and Deodorizer for Hard, Non-Porous Surfaces.

Manufacturer/Supplier:

Envirox LLC
1938 E. Fairchild St., Danville, IL 61834-2327
USA Tel 1-217-442-8596

Emergency Phone Number:

ChemTel Inc. 800-255-3924, +1-813-248-0585

SECTION 2 –HAZARD(S) IDENTIFICATION

(Top Section 2: Concentrate; Bottom Boxed Section 2: Dilutions)

Classification of the substance or mixture:
Health

Eye Irritation Category 2B

Physical

Not classified

GHS Label elements, including precautionary statements:

Signal Word: Warning

Hazard Statements

H320: Causes eye irritation

Precautionary Statements
Prevention

P264: Wash thoroughly after handling.

Response

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.

P337+313: If eye irritation persists get medical advice/attention.

Storage

P401: Store away from incompatible materials.

Disposal

P501: Dispose of contents according to local, state and federal regulations.

Other Hazards: None.

Ingredients of Unknown Acute Toxicity: None

Dilutions: For in use diluted product at 10 oz/gallon and 1 oz/gallon.

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS). This product is not classified as a Hazardous Chemical (or mixture) under OSHA §1910.1200 GHS.

GHS Label elements, including precautionary statements

Pictogram: None Required

Signal Word – None Required

Hazard Statements: None Required

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical Name	CAS Number	Weight % in Concentrate**	Weight % in Diluted Product (10oz/gal or 1 oz/gal)
Hydrogen peroxide	7722-84-1	3.75-4.15%	≤ 0.5
Surfactants*	---	3-7%	< 0.5
Orange Oil	8008-57-9	<2%	≤ 0.5

*The Specific ingredients have been withheld as a trade secret.

**The exact percentage is withheld as a trade secret.

SECTION 4 – FIRST-AID MEASURES

Description of first aid measures

Eye Contact

Concentrate: Rinse cautiously with water for several minutes. Remove contact lenses, if present, and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Diluted product: Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.

Skin Contact

Concentrate: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

Diluted product: Rinse with warm water. If skin irritation occurs, consult a Physician.

Ingestion

Concentrate: Call a 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 a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Diluted product: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

Inhalation

Concentrate: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then, give artificial respiration, preferably mouth to mouth. Call a poison control center or doctor for further treatment advice.

Diluted product: Supply fresh air; consult Physician in case of complaints.

Most important symptoms and effects, both acute and delayed:

Eyes: Causes eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision (**for concentrate**).

No relevant information (**for dilution**).

SECTION 5 - FIRE-FIGHTING MEASURES

(Concentrate Only. Diluted product is a water-based material.)

Suitable extinguishing media: Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Hazardous Combustion Products: Decomposition products include Carbon dioxide, carbon monoxide, and nitrogen oxides. During fire, gases hazardous to health may be formed.

Advice for Fire Fighters: Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

Fire Fighting Equipment: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Further Information: No unusual fire or explosion hazards noted.

SECTION 6 - ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental Precautions (for both Concentrate and Dilutions):

Water Spill: Avoid discharges into drains and open waterways.

Land Spill: Avoid discharge to soil.

Methods and material for containment and cleaning up: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk-through spilled material. Do not allow spilled material to mix with other products

For concentrate: To clean up spill, flood area with large quantities of water. Product or rinsates that cannot be used should be diluted with water before disposal in a sanitary sewer.

For diluted product: Absorb liquid components with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust) or clean mop. Clean the affected area with care and rinse with water.

References to Other Sections:

See section 13 for disposal considerations. See Section 8 for Personal Protective Equipment (PPE). See Section 12 for additional Ecological Information.

SECTION 7 - HANDLING AND STORAGE

(Both for Concentrate and Dilutions)

General: Keep container closed until used. Do not contaminate water, food, or feed by storage or disposal. Store in an area inaccessible to children.

Precautions for safe handling

Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Observe good industrial hygiene practices. Use care in handling/storage. Wear the appropriate personal protective equipment (see section 8).

Conditions for Safe Storage, including any incompatibilities

Store this product in a cool dry area, away from direct sunlight and heat to avoid deterioration. Avoid freezing conditions. Avoid high temperatures. Do not exceed storage temperatures of 95°F. Best storage temperatures are between 35°F and 85°F. Overheating in storage may result in increased degradation of product, which will decrease product effectiveness. Keep concentrate away from incompatible materials. Refillable container: Refill this container with pesticide only. Do not reuse this container for any other purpose.

Keep out of the Reach of Children.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	PEL	1.4 mg/m ³ 1 ppm

US. ACGIH Threshold Limit Values Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Components	Type	Value
Hydrogen peroxide (CAS 7722-84-1)	TWA	1.4 mg/m ³ 1 ppm

Exposure Controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Good general room ventilation should be adequate under normal conditions.

Personal protective equipment

Eye protection

Concentrate: Wear safety glasses.

Diluted Product: None required under GHS.* Avoid eye contact with mists. Safety glasses recommended, but not required.

Skin and body protection:

Concentrate: Use rubber, neoprene, nitrile, butyl or other chemical resistant gloves. Wear protective work clothing.

Diluted Product: none required under GHS.* Avoid prolonged skin contact. Recommended barrier gloves include rubber, butyl, neoprene, nitrile.

Respiratory protection (for both Concentrate or Diluted Product): Not required under normal conditions of use. Use suitable respiratory protective device when aerosol or mist is formed.

Hygiene Considerations (for both Concentrate or Diluted Product): Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

*Envirox recommends that barrier eye and hand protection be used when applying any cleaner, sanitizer, or disinfectant, but it is not required for the in-use dilution of this product under GHS (OSHA).

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Characteristic	Concentrate	Dilutions
Physical State:	Liquid	Liquid
Odor:	Citrus	Citrus
Odor threshold:	Not determined	Not determined
Color:	Clear	Clear
pH:	4.4 (20°C)	6.5 ± 0.5
Flash point:	Not Applicable	Not Applicable
Flammable Limits – lower (%):	Not Applicable	Not Applicable
Flammable Limits – upper(%):	Not Applicable	Not Applicable
Autoignition Temperature:	Not Applicable	Not Applicable
Vapor Pressure:	Not Applicable	Not Applicable
Vapor Density:	Not Applicable	Not Applicable
Boiling point:	212 °F / 100 °C	212 °F / 100 °C
Thermal Decomposition:	Not available	Not available
Explosive Limit – lower (%):	Not Applicable	Not Applicable
Explosive Limit – upper (%):	Not Applicable	Not Applicable
Water Solubility:	Fully miscible	Fully miscible
Evaporation rate:	Not available	Not available
Density:	Not Applicable	Not Applicable
Partition coefficient (noctanol/water)	Not Applicable	Not Applicable
Viscosity:	Not Applicable	Not Applicable

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: Stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

Conditions to avoid: Contact with incompatible materials.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity Table for Components:

Chemical Name	Acute	Species	Test Results
Hydrogen peroxide (CAS 7722-84-1)	Dermal LD50	Rabbit	>2000 mg/kg
	Inhalation LC50	Rat	2 mg/l, 4 hours
	Oral LD50	Rat	376 mg/kg

Skin Corrosion/Irritation

Concentrate: Prolonged skin contact may cause temporary irritation.

Dilutions: No irritating effect.

Serious Eye Damage/Irritation

Concentrate: Causes eye irritation

Dilutions: May cause slight irritating effect.

Respiratory or Skin Sensitization:

This product is not expected to cause skin or respiratory sensitization.

Germ Cell Mutagenicity:

No known significant effects or critical hazards.

Carcinogenicity:

IARC: None of the ingredients are listed.

NTP: None of the ingredients are listed.

Reproductive Toxicity (both Concentrate and Dilutions):

This product is not expected to cause reproductive or developmental effects.

STOT -Single Exposure: No known significant effects or critical hazards.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity

Concentrate: The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Aquatic	Species	Test Results
Hydrogen Peroxide (CAS 7722-84-1)	Crustacea LC50	Daphnia	24 mg/l, 48 hours
	Fish LC50	Bluegill (<i>Lepomis macrochirus</i>)	26.7 mg/l, 96 hours
		Chameleon goby (<i>Tridentiger trigonocephalus</i>)	155 mg/l, 24 hours
		Jack Mackerel (<i>Trachurus japonicus</i>)	89 mg/l, 24 hours
		Rainbow trout, Donaldson trout	22 mg/l, 96 hours

Bioaccumulation/Accumulation: No data available.

Persistence and degradability: No data is available on the degradability of this product.

Chemical Fate Information: No data available.

Mobility in Soil: Not determined.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal instructions: Do not contaminate food or feed by storage, disposal or cleaning of equipment. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Local disposal regulations: Dispose in accordance with all applicable regulations.

Hazardous waste code: The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products: Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging: CONTAINER HANDLING: If Empty: Do not reuse container. Place in trash or offer for recycling if available. If Partially Filled: Call your local solid waste for disposal instructions. Never place unused product down any indoor or outdoor drain. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application or a mix procedure two more times. Refillable containers -- cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. If in plastic bag with original box, discard in trash, sanitary landfill or by incineration, or if allowed by State and Local Authorities, by burning. If burning, stay out of smoke.

SECTION 14 - TRANSPORT INFORMATION

DOT: Not regulated as dangerous goods

IATA: Not regulated as dangerous goods.

IMDG: Not regulated as dangerous goods

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not established

SECTION 15 - REGULATORY INFORMATION

US Federal Regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III (Superfund Amendments and Reauthorizations Act) 311/312 Hazard Categories

311/312 Hazardous chemical: No

313 Reportable Ingredients: No listed substance

SARA 302 Extremely hazardous substance:

Chemical Name	CAS number	Reportable quantity (pounds)	Threshold planning quantity (pounds)	Threshold planning quantity, lower value (pounds)	Threshold planning quantity, upper value (pounds)
Hydrogen Peroxide	7722-84-1	1000	1000		

CERCLA: Not Listed.

TSCA (Toxic Substances Control Act): All ingredients are listed on the TSCA Chemical Inventory.

Clean Air Act: Not Regulated.

State Specific Information:

California Proposition 65: The product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

US. Massachusetts RTK - Substance List: Hydrogen peroxide (CAS 7722-84-1)

US. New Jersey Worker and Community Right-to-Know Act: Hydrogen peroxide (CAS 7722-84-1)

US. Pennsylvania Worker and Community Right-to-Know Law: Hydrogen peroxide (CAS 7722-84-1)

US. Rhode Island RTK: Hydrogen peroxide (CAS 7722-84-1)

FIFRA Label Information: This chemical is a pesticide product registered by the United States Environmental Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The pesticide label also includes other important information, including directions for use.

SECTION 16 – OTHER INFORMATION

NFPA/HMIS

Standard	Health	Flammability/Fire	Reactivity
NFPA (Concentrate)	2	0	0
HMIS (Concentrate)	2	0	0
NFPA (Dilutions)	1	0	0
HMIS (Dilutions)	1	0	0

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Keep Out of Reach of Children. For Industrial and Institutional Use Only.

Revision: 04/05/2023

Revision Notes: Combined concentrate and dilution SDS, updated eye irritation 2B.

End of Safety Data Sheet