SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier: EnvirOx H2Orange2 Concentrate 117

Other means of identification

Product code: 117

Product registration number: 69268-2

Recommended use: Oxidizing Multipurpose Cleaner, Degreaser and Sanitizer (Non-Food Contact Surfaces), Virucide and Deodorizer for Hard, Non-Porous Surfaces

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer/Supplier	EnvirOx LLC
Address	P.O. Box 2327 1938 E. Fairchild St. Danville, IL 61834-2327 USA
Telephone	1-217-442-8596
Emergency Phone Number:	ChemTel Inc. 800-255-3924, +1-813-248-0585

SECTION 2 –HAZARD(S) IDENTIFICATION

Physical hazards: Not classified.

OSHA defined hazards: Not classified.

Classification of the substance or mixture:

Eye Irritation Category 2A

Signal Word – Warning

Hazard statement: Causes serious eye irritation.

Precautionary statements:

Prevention: Wash thoroughly after handling. Wear eye/face protection.

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

Storage: Store away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): Repeat or prolonged use may result in contact dermatitis in sensitive individuals.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Chemical Name	CAS Number	%
Hydrogen peroxide	7722-84-1	3.75-4.15%
Orange Oil	8008-57-9	<2%

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

SECTION 4 - FIRST-AID MEASURES

Inhalation: 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.

Skin contact: 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.

Eye contact: 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.

Ingestion: 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.

Most important symptoms/effects, acute and delayed: Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Indication of immediate medical attention and special treatment needed: Probable mucosal damage may contraindicate the use of gastric lavage.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

SECTION 5 - FIRE-FIGHTING MEASURES

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.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions: Move containers from fire area if you can do so without risk.

Specific methods: Use standard firefighting procedures and consider the hazards of other involved materials**.**

General fire hazards: No unusual fire or explosion hazards noted.

SECTION 6 - ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures: Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: 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**.**

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.

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.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

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/m3
		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/m3
		1 ppm

Biological limit values: No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: No further information available.

Individual protection measures, such as personal protective equipment

Eye/face protection: Safety glasses.

Skin protection

Hand protection: Rubber gloves, Butyl rubber, Nitrile rubber, or Neoprene gloves.

Other: Protective work clothing.

Respiratory protection: Not required under normal conditions of handling. Use suitable respiratory protective device when aerosol or mist is formed.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: 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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Physical State: Liquid Form: Liquid Color: Clear
Odor:	Citrus
Odor threshold:	Not determined
pH	4.4 (20°C)
Melting point/Melting range:	Undetermined
Boiling point/Boiling range:	212 °F / 100 °C
Flash point:	Not applicable
Evaporation rate:	Not available.
Flammability (solid, gaseous):	Not applicable
Flammability limit – lower (%)	Not available.

Flammability limit – upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure:	Not available.
Vapor density:	Not available.
Relative Density:	Not available.
Solubility:	Fully miscible
Partition coefficient (noctanol/water):	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability: Material is stable under normal 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: No hazardous decomposition products are known.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Inhalation: Prolonged inhalation may be harmful.

Skin contact: No adverse effects due to skin contact are expected.

Eye Contact: Causes serious eye irritation.

Ingestion: Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics: Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Information on toxicological effect: Acute toxicity

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

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Causes serious eye irritation.

RESPIRATORY OR SKIN SENSITIZATION

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Hydrogen peroxide (CAS 7722-84-1) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

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

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

SECTION 12 - ECOLOGICAL INFORMATION

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

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

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal instructions PESTICIDE DISPOSAL: 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 waterand 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.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories

Immediate Hazard – Yes
Delayed Hazard – No
Fire Hazard – No
Pressure Hazard – No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

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

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

FIFRA Information

This chemical is a pesticide product registered by the Environmental Protection 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

Signal word CAUTION

Hazard statement

PRECAUTIONARY STATEMENTS - HAZARDS TO HUMAN AND DOMESTIC ANIMALS

Causes moderate eye damage. Harmful if swallowed, absorbed through the skin, or inhaled. Avoid contact with eyes, skin or clothing. Wash thoroughly with soap and water after handling.

After product is diluted in accordance with directions for use, safety glasses or other eye protection are not required. Product after dilution according to directions, is non-irritating.

US state regulations

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)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

SECTION 16 - OTHER INFORMATION

Revision Date 15 – February – 2016

Disclaimer: EnvirOx LLC cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.