



SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product Identifier:

EnvirOx Broad Spectrum Disinfectant 256 (**Concentrate & Dilutions**)

(Note: The Concentrated Disinfectant and Dilution specific relevant information is marked in each Section of the SDS, where the Dilution means at a ratio of 1:128 or 1:256.)

Product Number: 106 (and In-Use Dilutions)

EPA Number: 6836-349-69268

Recommended use of the chemical and restrictions on use:

Cleaner and Hard, Non-Porous Surface Disinfection, Fungicide, Virucide, and Deodorizer.

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 Section 2: Dilutions)

Classification of the substance or mixture

Health



Corrosion Exclamation Mark Environment

Serious Eye Damage, Category 1

Skin Corrosion, Category 1B

Acute Toxicity (Oral), Category 4

Physical

Combustible Liquid, Category 4

GHS Label elements, including precautionary statements

Signal Word: Danger

Hazard Statements

H318: Causes serious eye damage.

H314: Causes severe skin burns and eye damage.

H302: Harmful if swallowed.

H227: Combustible liquid.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P270: Do not eat, drink or smoke when using this product.

P264: Wash hands thoroughly after handling.

P102: Keep out of reach of children.

P210: Keep away from heat/sparks/open flames/hot surfaces and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

Response

P301 + P330 + P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P310: Immediately call a POISON CENTER or doctor/physician.

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 or doctor/physician.

P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

P370 + P378: In case of fire: Use dry chemical, foam, or water mist for extinction.

Disposal

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

Other Hazards: None Known

Ingredients of Unknown Acute Toxicity: None

For in use diluted product at 1:128 or 1:256 dilutions.

Classification of the substance or mixture:

Health



Exclamation Mark

Serious Eye Irritation, Category 2A

Skin Irritation, Category 3

GHS Label elements, including precautionary statements

Signal Word: WARNING

Hazard Statements

H319: Causes serious eye irritation.

H316: Causes mild skin irritation.

H303: May be harmful if swallowed.

Precautionary Statements

Prevention

P262: Do not get in eyes, on skin, or on clothing.

P233: Keep container tightly closed.

P102: Keep out of reach of children.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

304 + P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Storage

P404: Store in a closed container.

Disposal

P501: Dispose of contents/container in accordance with all local, state, and Federal regulations.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Components

Chemical Name	CAS Number*	Weight % in Concentrate**	Weight % in Diluted Product (1:128 or 1:256)
Water	7732-18-5	75-85 %	>95 %
Alkyl dimethylbenzyl ammonium chloride (C12-C16)	68424-85-1	8-10 %	< 0.1 %
Octyl decyl dimethyl ammonium chloride	32426-11-2	6-8 %	< 0.1 %
Didecyl dimethyl ammonium chloride	7173-51-5	3.5-5 %	< 0.1 %
Dioctyl dimethyl ammonium chloride	5538-94-3	2-5 %	< 0.1 %
Fragrance	*	<1%	<0.1%

Dye	*	<0.1%	<0.01%
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*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

Flush with water for at least 15 minutes. Remove contact lenses if present and easy to do so after the first 5 minutes and continue rinsing. Get medical attention immediately (**for concentrate**).

Skin Contact

Remove contaminated clothing. Immediately flush with plenty of water followed by washing with mild soap. Seek medical attention (**for concentrate**). [*Get medical attention if irritation develops or persists (for diluted product).*]

Ingestion

Get immediate medical attention. Rinse mouth with water. Never give anything by mouth to an unconscious person. Do not induce vomiting unless told to do so by a physician or a poison control center.

Inhalation

Move person to fresh air and monitor. If person is not breathing, give artificial respiration, and seek medical attention, call 911.

Most important symptoms and effects, both acute and delayed:

Eyes: Severe burning sensation, damage marked by burns (concentrate). [*Burning sensation with tearing, redness (for diluted product).*]

Skin: Burning sensation, redness (**concentrate**). [*Prolonged contact will cause irritation marked by redness, and burning sensation (diluted product).*]

Skin Absorption: Not established.

Ingestion: Irritation of mouth, throat, along with stomach upset, vomiting.

Inhalation: Irritation of nose, throat, lungs with coughing, sneezing, possible difficulty breathing.

Acute Effects: Corrosive to eyes. Causes moderate to severe skin irritation (**concentrate**). [*None established (for diluted product).*]

Chronic Effects: No known significant effects or critical hazards.

Notes to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5 - FIRE-FIGHTING MEASURES

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

Flammable Class: Combustible Liquid Category 4 (NFPA 30 Class IIIA:140-200 F), (**Concentrate**). [*Not applicable for diluted product.*]

Suitable extinguishing media: Use Dry Chemical, Carbon Dioxide, or Water spray when fighting fires involving this material (**concentrate only**).

Unsuitable extinguishing media: Not determined.

Hazardous Combustion Products: Products of combustion are toxic (**concentrate**).

Advice for Fire Fighters: Keep fire exposed containers cool with water stream or mist (**Concentrate**).

Fire Fighting Equipment: Fire-Fighters should wear appropriate PPE including a positive pressure, full-face, self-contained breathing apparatus (SCBA) (**Concentrate**).

Further Information

Hazardous Combustion Products: Decomposition products include Carbon dioxide, carbon monoxide, and nitrogen oxides.

SECTION 6 - ACCIDENTAL RELEASE MEASURES:

Small Spill: For Concentrate, Shut off any ignition sources. Avoid walking in material. Prevent runoff into storm sewers and ditches which lead to waterways.

[*For Diluted Product, Avoid walking in material. Wipe up, mop, or otherwise flush small spills to sanitary sewer.*]

Large Spill: For Concentrate, Shut off any ignition sources. Ventilate area. Avoid walking in material. Prevent runoff into storm sewers and ditches which lead to waterways.

[*For Diluted Product, Avoid walking in material. Prevent product from entering into streams, soil, storm sewer, or other bodies of water.*]

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 open waterways.

Land Spill: Avoid discharge to soil.

Methods and material for containment and cleaning up: Eliminate all sources of ignition (**for Concentrate**). Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk-through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand, clay, or other non-combustible inert absorbent material, and transfer waste to appropriately labeled disposal containers. Rinse area with clean water (or mop) and allow to dry before permitting traffic.

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

General: Store away from excessive heat, spark, or open flame. Store at Temperatures below 140° F in a well ventilated place. 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 skin and eyes. Avoid inhalation of mist. Provide adequate ventilation. Wear the appropriate personal protective equipment (see section 8).

Conditions for Safe Storage, including any incompatibilities

Do not mix with other products. Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Protect from freezing. Avoid high temperatures. Store at ambient temperatures and pressure, best where temperatures are between 35° F and 85° F. **Keep out of the Reach of Children.**

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Components with workplace control parameters. Occupational Exposure Limits: Exposure limits for compounds listed in Section 3 have not been issued by OSHA, NIOSH, or ACGIH.

Exposure Controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas (**for concentrate**). Good general room ventilation (equivalent to outdoors) should be adequate under normal conditions. Know location and distance from nearest eyewash station and showers (**for concentrate**).

Personal protective equipment

Eye protection

Concentrate: Wear chemical splash goggles and full face shield when concentrated material has breached the closed loop system. safety glasses or goggles.

Diluted Product: Use safety glasses with side shields when using the in-use dilution ratios (1:128 through 1:256).

Skin (for both Concentrate or Diluted Product): Use rubber, neoprene, nitrile, or other chemical resistant gloves.

Body protection: If **concentrate** has breached the closed loop system; and spray, splash, or mist of **concentrate** is foreseeable, wear chemical resistant outdoor wear (such as Tyvek). *There are no special requirements for the diluted product.*

Respiratory protection: A respirator is not needed under normal and intended conditions of product use.

Hygiene Considerations (for both Concentrate or Diluted Product): Wash with soap and water after handling. Do not eat, drink, or smoke while using product. Handle in accordance with good industrial hygiene and safety practices.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Characteristic	Concentrate	Dilutions
Physical State:	Liquid	Liquid
Odor:	Lavender	Lavender
Color:	Purple	Light Purple
pH:	12-13.5	~9.5
% Volatile:	>80 (Concentrate)	>90 (dilutions)
Flash point: ¹	61° C via Tag Closed Cup.	Not Applicable
Flammable Limits:	Not Determined	Not Applicable
Autoignition Temperature:	Not Applicable	Not Applicable
Vapor Pressure:	20 mm Hg (20° C)	<20 mm Hg
Vapor Density:	~1 (Air = 1)	>1
Boiling point:	212 °F / 100 °C	212 °F / 100 °C
Freezing point:	32 °F / 0 °C	32 °F / 0 °C

Thermal Decomposition:	Not available	Not available
Water Solubility:	Completely Soluble	Completely Sol.
Evaporation rate:	1 (water = 1)	1
Density:	8.47 (20° C)	8.34
Specific Gravity:	1.015 g/ml (20° C)	1.01
Viscosity:	Slightly viscous	Water thin
(VOC)	Not Established	Not Established

¹Does not sustain combustion according to ASTM 4206.

SECTION 10 - STABILITY AND REACTIVITY

(Both for Concentrate and Dilutions)

Reactivity: Stable

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Hazardous polymerization will not occur.

Conditions to avoid: Not Established.

Incompatible materials: None known.

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

SECTION 11 - TOXICOLOGICAL INFORMATION

(Concentrate Only)

Acute Toxicity Table for Components:

Chemical Name	Oral LD ₅₀ (rat, mouse)	Dermal LD ₅₀ (rabbit)
Alkyl dimethylbenzyl ammonium chloride	450 mg/kg (rat)	3342 mg/kg
Didecyl dimethyl ammonium chloride	268 mg/kg (mouse)	2730 mg/kg
Octyl decyl dimethyl ammonium chloride	200 to 2000 mg/kg (rat)	Not available
Diocetyl dimethyl ammonium chloride	50 mg/kg (mouse)	Not available

Dermal LD₅₀ (Concentrate) > 2100 mg/kg (rabbit, male & female)

Oral LD₅₀ (Concentrate) > 1600 mg/kg (rat, male & female)

Skin Corrosion/Irritation

Concentrate: Corrosive

Dilutions: Mild Skin Irritation

Serious Eye Damage/Irritation

Concentrate: Corrosive

Dilutions: Irritant

Respiratory or Skin Sensitization

Concentrate: Not yet known.

Dilutions: No known significant effects or critical hazards.

Germ Cell Mutagenicity (both Concentrate and Dilutions):

No known significant effects or critical hazards.

Carcinogenicity (both Concentrate and Dilutions):

IARC: No listed Substance.

NTP: No listed Substance.

Reproductive Toxicity (both Concentrate and Dilutions):

No known significant effects or critical hazards.

STOT -Single Exposure (both Concentrate and Dilutions):

No known significant effects or critical hazards.

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Data: Not Established

Ecotoxicity

Concentrate: This material may be toxic to aquatic life.

Dilutions: Not Established

Bioaccumulation/Accumulation: Not Established

Aquatic Toxicity (Acute): Not Established

Chemical Fate Information: Not Established

Mobility in Soil: Not determined.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method: Disposal should be in accordance with applicable regional, national and local laws and regulations.

Concentrate: Attempt to use product completely in accordance with intended use. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste Representative at your local office, or the nearest EPA regional office for guidance.

Dilutions: Small amounts (less than 5 gallons) may be disposed of in a sanitary sewer. Consult local authorities for additional disposal information.

For Large Spills: Consult with local and state authorities for large volume disposal.

Empty Container(s): Use a Triple rinse procedure promptly after emptying. [Remove any plug devices. Fill container ¼ full with water, cap/close container and vigorously shake for 10 seconds. Drain and repeat two additional times.] Offer empty (and triple rinsed) container for recycling, or dispose in trash, or by other procedures approved by state and local authorities. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14 - TRANSPORT INFORMATION

(Concentrate Only; the Dilutions are not to be shipped from end-user site)

DOT:

Proper Shipping Name: Disinfectant, liquid, corrosive n. o. s.

Technical Name: Quaternary Ammonium Compounds

Primary Hazard Class/Division: 8

UN/NA Number: 1903

Packing Group: III

NAERG: 153

Placards: Corrosive

Label: Certain package sizes determine the proper labeling of containers. Consult manufacturer for specific information regarding proper labeling.

Other Shipping Information: Certain shipping modes and packaging sizes may have exceptions from the transport regulations. The classifications/information provided above may not reflect applicable exceptions. Contact the manufacturer for more specific information on the proper shipping of this material.

US Customs Harmonization Number: 3808.94.0000

IATA:

Shipping Name: Contact manufacturer for more information.

Technical Name: Contact manufacturer for more information.

IMDG:

Shipping Name: Disinfectant, liquid, corrosive n. o. s.

Technical Name: Quaternary Ammonium Compounds

Primary Hazard Class/Division: 8

UN/NA Number: 1903

Packing Group: III

EmS: F-E

Label: Corrosive

SECTION 15 - REGULATORY INFORMATION

US Federal Regulations

DOT Label Symbol and Hazard Classification



Corrosive Limited Quantity Ground

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

311/312 Health Hazard: Acute Toxicity (Oral), Health -Acute

311/312 Physical Hazards: Flammable Liquids

313 Reportable Ingredients: No listed substance

302/304 Emergency Planning: No listed substance

CERCLA: Not Applicable

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

Clean Air Act: No listed substance

RCRA Status: No listed substance

CWA (Clean Water Act): No listed substance

US State Regulations

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.

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

Standard	Health Hazard Rating (Chronic *)	Flammability/Fire Hazard	Reactivity/Physical Hazard	Special-NFPA -or- Personal Protection-HMIS
NFPA (Concentrate)	3	0	0	(Blank)
HMIS (Concentrate)	3	0	0	B
NFPA (Dilutions)	2	0	0	(Blank)
HMIS (Dilutions)	1	0	0	B

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.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

Revision: 07/27/2021

Revision Notes: Combustible Liq Cat 4, H410-jd.

End of Safety Data Sheet