

1. Identification

Product name: CaviCide 1™

Recommended use: Hard surface cleaner and disinfectant, Read and understand the entire label before using. Use only according to label directions. It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Restrictions on use: None known

Manufacturer: METREX® RESEARCH
28210 Wick Road
Romulus, MI., 48174-U.S.A.
T 1-800-841-1428 (Customer Service)

Emergency number: (Chemical Spills, Leaks, Fire, Exposure or Accident only):
CHEMTREC 1-800-424-9300 (in the US), 1-703-527-3887 (Outside the US)

Issue date: 05/18/2022

2. Hazard(s) identification

Classification:

Physical hazards	Health hazards	Environmental hazards
Flammable liquids Category 3	Eye irritation Category 2A	Hazardous to the aquatic environment - Acute Hazard Category 3

GHS US labeling:

Warning!



Hazard statements (GHS US)	Precautionary statements (GHS US)
H226 - Flammable liquid and vapor H319 - Causes serious eye irritation H402 - Harmful to aquatic life	P210 - Keep away from heat, hot surfaces, sparks, open flames 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. P264 - Wash hands thoroughly after handling. P273 - Avoid release to the environment. P280 - Wear eye protection.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use Water spray or fog, alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO2) to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

3: Composition/Information on ingredients

Component	CAS-No.	Amount (%)
Propan-2-ol, isopropyl alcohol, isopropanol	67-63-0	15
Ethanol	64-17-5	7.5
2-Butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve	111-76-2	1 – 5
Didecyldimethylammonium chloride	7173-51-5	0.76

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

4. First-aid measures

Inhalation: Move the affected person to fresh air. Get medical attention if symptoms occur.

Skin: Gently wash with plenty of soap and water. Seek medical attention if irritation develops.

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.

Ingestion: Rinse mouth thoroughly with water. Do NOT induce vomiting. Call a poison center or a doctor if you feel unwell.

Symptoms/effects: May cause moderate irritation to the eyes. Repeated exposure may cause skin dryness or cracking. Inhalation of vapors may cause respiratory irritation.

Immediate medical attention and special treatment, if necessary: Not required.

5. Fire-fighting measures

Suitable extinguishing media: Use dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable extinguishing media: None.

Fire hazard: Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. On combustion releases: Carbon oxides (CO, CO2). Nitrogen oxides. Amines. chlorine oxides.

Special protective equipment and precautions for fire-fighters: In case of fire: Stop leak if safe to do so. Cool down the containers exposed to heat with a water spray. Do not enter fire area without proper protective equipment, including respiratory protection.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Remove ignition sources. Avoid contact with eyes, skin and clothing. Wear suitable protective clothing. Ventilate area.

Methods and material for containment and cleaning up: Stop leak if safe to do so. Remove all sources of ignition. Use non-sparking tools. Absorb and/or contain spill with inert material, then place in suitable container. Notify authorities if product enters sewers or public waters. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

7. Handling and storage

Precautions for safe handling: Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with eyes, skin and clothing. Wear personal protective equipment. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid breathing mist, vapors. Ensure adequate ventilation. Refer to product label for additional information on use and handling. Follow all SDS precautions in Section 13 when handling empty containers.

Storage conditions: Store at room temperature. Store in dry, well-ventilated area. Keep away from heat and direct sunlight. Keep container closed when not in use. Do not contaminate water, food, or feed by storage or disposal.

8. Exposure controls/personal protection

Exposure guidelines:	
Propan-2-ol, isopropyl alcohol, isopropanol	980 mg/m ³ TWA OSHA PEL; 400 ppm TWA OSHA PEL; 200 ppm TWA ACGIH TLV; 400 ppm STEL ACGIH TLV;
2-Butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve	240 mg/m ³ TWA OSHA PEL; 50 ppm TWA OSHA PEL; 20 ppm TWA ACGIH TLV;
Ethanol	1900 mg/m ³ TWA OSHA PEL; 1000 ppm TWA OSHA PEL; 1000 ppm STEL ACGIH TLV;
Didecyldimethylammonium chloride	None established.

Appropriate engineering controls: Use with adequate general or local exhaust ventilation to maintain exposure levels below the occupational exposure limits.

Environmental exposure controls: Avoid release to the environment.

Personal protective equipment:

Hand protection: In case of repeated or prolonged contact wear gloves

Eye protection: Wear safety goggles or other eye protection to prevent eye contact.

Skin and body protection: Wear suitable protective clothing

Respiratory protection: No respiratory protection needed under normal use conditions. In operations where exposure limits are exceeded or exposure levels are excessive, an approved respirator should be used. Respirator selection and use should be based on contaminant type, form and concentration. Follow applicable regulations and good Industrial Hygiene practice.

9. Physical and chemical properties

Appearance: Hazy to clear. Liquid.

Physical state : Liquid

Color : Hazy to clear

Odor	: Alcohol	Partition coefficient n-octanol/water (Log Pow)	: No data available
Odor threshold	: 0.001 ppm Ethylene glycol monobutyl ether (EGBE)	Auto-ignition temperature	: Not applicable
pH	: 8.5 – 12.49	Decomposition temperature	: No data available
Melting point	: Not applicable	Viscosity, kinematic	: No data available
Freezing point	: Not applicable	Viscosity, dynamic	: No data available
Boiling point	: No data available	Explosion limits	: Lower explosive limit (LEL): 2 vol % (Isopropanol) Upper explosive limit (UEL): 19 vol % (Ethanol)
Flash point	: 34.4 °C (93.92 °F)	Explosive properties	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available	Oxidizing properties	: No data available
Flammability (solid, gas)	: Not applicable.		
Vapor pressure	: 19 kPa 20°C (Ethanol)		
Relative vapor density at 20 °C	: 5.87 (Ethanol)		
Relative density	: 0.964		
Solubility	: Soluble in water.		
VOC content : 20 %			

10. Stability and reactivity

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

Chemical stability: Stable under normal conditions.

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

Conditions to avoid: Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials: Oxidizing agents, reducing agents, acids, bases.

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

11. Toxicological information

Inhalation: At high concentrations, the vapors can be irritating to the respiratory system. High concentration of vapors may induce: headache, nausea, dizziness.

Skin: Repeated or prolonged skin contact may cause irritation. Repeated exposure may cause skin dryness or cracking.

Eyes: May cause moderate irritation, including burning sensation, tearing, redness or swelling.

Ingestion: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms: Prolonged overexposure to ethylene glycol monobutyl ether may affect liver, kidneys, blood, lymphatic system or central nervous system.

Carcinogenicity:	Not classified
Propan-2-ol, isopropyl alcohol, isopropanol:	IARC 3 - Not classifiable;
2-Butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve:	IARC 3 - Not classifiable;

Ethanol:	This component is not listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.
Didecyldimethylammonium chloride:	This component is not listed as a carcinogen or suspected carcinogen by IARC, NTP, ACGIH, OSHA or the EU CLP.
Germ cell mutagenicity:	Not classified
Reproductive toxicity:	Not classified
Propan-2-ol, isopropyl alcohol, isopropanol:	Not classified
Numerical measures of toxicity:	Oral rat LD50- > 5000 mg/kg; Dermal rat LD50- > 5050 mg/kg; Inhalation rat LC50->2.6 mg/L/4hr

The following are the toxicity values for the components:

Propan-2-ol, isopropyl alcohol, isopropanol:	Oral rat LD50- 5840 mg/kg; Dermal rabbit LD50- 16.4 ml/kg; Inhalation rat LC50- 1666.66 ppm/1h
2-Butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve:	Oral rat LD50- 1746 mg/kg; Dermal rat LD50- > 2000 mg/kg;
Ethanol:	Oral rat LD50- 15010 mg/kg body weight;
Didecyldimethylammonium chloride:	Oral rat LD50- 238 mg/kg; Dermal rabbit LD50- ≈ 3342 mg/kg;

Skin corrosion/irritation This product was tested and based on available data, the classification criteria are not met.

pH: 8.5 – 12.49

Serious eye damage/irritation Causes eye irritation. On basis of test data

pH: 8.5 – 12.49

Respiratory or skin sensitization No sensitizing reaction was observed for guinea pigs. This product was tested and based on available data, the classification criteria are not met.

STOT-single exposure Not classified

STOT-repeated exposure Not classified

12. Ecological information

Ecology - general: Harmful to aquatic life.

CaviCide 1™

LC50 - Fish [1]	32.1 mg/l Pimephales promelas (Fathead minnow)
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Ecotoxicity:

Propan-2-ol, isopropyl alcohol, isopropanol	10000 mg/L Fish LC50; 10000 mg/L Daphnia EC50
2-Butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve	1474 mg/L Fish LC50; 1800 mg/L Daphnia EC50
Ethanol	14.2 g/L Fish LC50; 100 mg/L Daphnia EC50
Didecyldimethylammonium chloride	0.97 mg/L Fish LC50; 0.057 mg/L Daphnia EC50

Persistence and degradability: No data available

Propan-2-ol, isopropyl alcohol, isopropanol: Readily biodegradable.

Ethanol: Readily biodegradable.

Bioaccumulative potential: No data available
Propan-2-ol, isopropyl alcohol, isopropanol: BCF Fish - 3; Log KOW0.05
Mobility in soil: No data available

Other adverse effects:
No data available

13. Disposal considerations

Regional legislation (waste): Solution Disposal: Discharge residual and unused solutions in accordance with Federal, State, and local regulations. For used solution, the waste solution must be characterized by the generator and disposed of in accordance with Federal, State, and local regulations. Container Disposal: Nonrefillable container. Do not reuse or refill this container. Offer for recycling, if available. If recycling is not available, discard in accordance with hospital policy.

14. Transport information

Department of Transportation (DOT)

Not regulated for transport

Transport by sea

Proper Shipping Name (IMDG) : ALCOHOLS, N.O.S. (Propan-2-ol, isopropyl alcohol, isopropanol ; Ethanol)
UN-No. (IMDG) : 1987
Class (IMDG) : 3
Packing group (IMDG) : III

Air transport

Proper Shipping Name (IATA) : Alcohols, n.o.s. (Propan-2-ol, isopropyl alcohol, isopropanol ; Ethanol)
UN-No. (IATA) : 1987
Class (IATA) : 3
Packing group (IATA) : III

15. Regulatory information

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

FIFRA Labeling:

Keep Out Of Reach of Children
WARNING
PRECAUTIONARY STATEMENTS
Hazards to Humans and Domestic Animals

WARNING Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Wear [appropriate protective eyewear such as] goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

Physical or Chemical Hazards: Combustible. Do not use or store near heat or open flame.

SARA Section 313 - Emission Reporting:

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

2-Butoxyethanol, ethylene glycol monobutyl ether, butyl cellosolve	111-76-2	1 – 5%
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CERCLA Section 103:

This product is not subject to reporting under CERCLA. However, many states have more stringent reporting requirements. Report all spills in accordance with local, state, and federal regulations.

SARA 302:

Not applicable

SARA Section 311/312 Hazard Classes: Refer to Section 2 for OSHA Hazard Classification.

TSCA: All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

16. Other information

Revision date : 05/18/2022
Supersedes date : 11/22/2021
Revision History : Updated sections 1, 9, 11,12 and 15.

NOTICE

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date of preparation, however, METREX® RESEARCH makes no warranty with respect to the accuracy or suitability of the recommendations, and assumes no liability to any use thereof.