



## SAFETY DATA SHEET

### Section 1. Product And Company Identification

**Product Name:** CaviCide™ AF

**Product Use:** Hard Surface Disinfectant. Use only according to label directions. It is a violation of Federal law to use this product in a manner inconsistent to label directions.

**Manufacturer:** METREX® RESEARCH  
28210 Wick Rd  
Romulus, MI 48174  
U.S.A.

**EPA Registration Number:** 1839-225-46781

**Information Phone Number:** 1-800-841-1428 (Customer Service)

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

**SDS Date of Preparation/Revision:** August 12, 2015

### Section 2. Hazards Identification

**GHS / HAZCOM 2012 Classification:**  
Eye Irritation Category 2B

#### Label Elements

#### Warning!

Hazard Phrases  
Causes eye irritation.

Precautionary Phrases  
Wash thoroughly after handling.  
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 attention.

**Other Hazards:** None identified

### Section 3. Composition/Information On Ingredients

Component	CAS No./ EC No.	Amount
Water and non-hazardous ingredients	Mixture	70-90%
Diethylene Glycol Monobutyl Ether	112-34-5 / 203-961-6	1-10%



Component	CAS No./ EC No.	Amount
Alkyl (68% C <sub>12</sub> , 32% C <sub>14</sub> ) dimethyl ethylbenzyl ammonium chlorides	85409-23-0 / 287-090-7 68956-79-6 / 273-318-2	<1%
Alkyl (60% C <sub>14</sub> , 30% C <sub>16</sub> , 5% C <sub>12</sub> , 5% C <sub>18</sub> ) dimethyl benzyl ammonium chlorides	68391-01-5 / 269-919-4 53516-76-0) / Not assigned	<1%

**The specific identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.**

#### Section 4. First Aid Measures

**Inhalation:** Remove to fresh air. If irritation or difficulty in breathing persists, get medical attention.

**Skin Contact:** Wash skin with soap and water. Get medical attention if irritation persists. Remove contaminated clothing and launder before re-use.

**Eye Contact:** Promptly flush eye with water, holding the eyelid open to ensure thorough rinsing. Get medical attention.

**Ingestion:** Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical attention.

**Most Important symptoms and effects, both acute and delayed:** May cause eye irritation. Prolonged skin contact may cause irritation. Inhalation of mists may cause upper respiratory tract irritation with coughing. Ingestion may cause gastric upset and nausea.

**Indication of any immediate medical attention and special treatment needed:** Immediate medical attention is not required.

#### Section 5. Firefighting Measures

**Suitable (and Unsuitable) Extinguishing Media:** Use any extinguishing media appropriate for the surrounding fire. Cool fire exposed containers with water.

**Special Hazards Arising from the Chemical:** Not flammable or combustible. Product will burn only after the water has evaporated. Combustion may produce carbon and nitrogen oxides and ammonia.

**Special Protective Equipment and Precautions for Fire-fighters:** Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in areas where chemicals are used or stored.

#### Section 6: Accidental Release Measures

**Personal Precautions, Protective Equipment and Emergency Procedures:** Avoid contact with eyes. Avoid prolonged contact with skin and clothing. Avoid breathing vapors or mists. Wear appropriate protective clothing as described in Section 8.

**Environmental Precautions:** Avoid release to the environment. Report spill as required by local and federal regulations.



**Methods and Material for Containment and Cleaning Up:** Small spills may be mopped up, flushed away with water or absorbed on some absorbent material and incinerated. Large spills should be contained, the material then moved into containers and disposed of by approved methods for hazardous wastes.

## Section 7. Handling and Storage

**Precautions for Safe Handling:** Avoid contact with the eyes. Avoid prolonged contact with skin and clothing. Avoid breathing vapors or mists. Use with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Wash contaminated clothing before reuse.

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Fill container ¼ full with water and recap. Agitate vigorously. Follow Pesticide Disposal instructions for rinsate disposal. Drain for 10 seconds after flow begins to drip. Repeat procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.

Empty containers retain product residues which can be hazardous. Follow all SDS precautions when handling empty containers.

**Conditions for Safe Storage, Including any Incompatibilities:** Store in a dry place no lower in temperature than 50°F or higher than 120°F.

## Section 8. Exposure Controls/Personal Protection

### Exposure Limits

Chemical	Exposure Limit
Diethylene Glycol Monobutyl Ether	10 ppm TWA ACGIH TLV (inhalable fraction and vapor)
Alkyl (68% C <sub>12</sub> , 32% C <sub>14</sub> ) dimethyl ethylbenzyl ammonium chlorides	None Established
Alkyl (60% C <sub>14</sub> , 30% C <sub>16</sub> , 5% C <sub>12</sub> , 5% C <sub>18</sub> ) dimethyl benzyl ammonium chlorides	None Established

**Appropriate Engineering Controls:** Use with adequate general or local exhaust ventilation to maintain exposures below the occupational exposure limits.

### Personal Protective Measures

**Respiratory Protection:** For operations where the occupational exposure limits are exceeded, an approved respirator with an organic vapor cartridges with a dust/mist prefilter or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with applicable regulations and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

**Hand protection:** Impervious gloves recommended to for prolonged skin contact.



**Eye Protection:** Safety goggles recommended if splashing is possible.

**Skin Protection:** Wear protective clothing if needed to avoid skin contact. Contaminated clothing should be removed and laundered before re-use.

**Hygiene measures:** None required.

### Section 9. Physical and Chemical Properties

<b>Appearance:</b>	Clear liquid	<b>Vapor Pressure:</b>	Same as water
<b>Odor:</b>	Mild chemical odor	<b>Vapor Density:</b>	Same as water
<b>Odor Threshold:</b>	Not determined	<b>Relative Density /Specific Gravity:</b>	0.96-1.05
<b>pH:</b>	11.0-12.7	<b>Solubility in Water:</b>	Complete
<b>Melting/Freezing Point:</b>	>32°F (>0°C)	<b>Partition Coefficient: (n-octanol/water)</b>	Not determined
<b>Initial Boiling Point/Range:</b>	>212°F (>100°C)	<b>Auto-ignition Temperature:</b>	Not determined
<b>Flash Point:</b>	>201°F (93.9°C)	<b>Decomposition Temperature:</b>	Not determined
<b>Evaporation Rate:</b>	Same as water	<b>Viscosity:</b>	Not determined
<b>Flammability: (solid/gas)</b>	Not flammable	<b>Explosive Properties:</b>	None
<b>Flammable/ Explosive Limits:</b>	Not applicable	<b>Oxidizing Properties:</b>	None
<b>Percent Volatile:</b>	>80%		

### Section 10. Stability and Reactivity

**Reactivity:** Not reactive at ambient temperatures.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Not reactive.

**Conditions to Avoid:** Avoid excessive heat.

**Incompatible Materials:** Avoid oxidizing agent and strong acids.

**Hazardous Decomposition Products:** Thermal decomposition may produce carbon and nitrogen oxides, ammonia and low molecular weight hydrocarbons.

### Section 11. Toxicological Information

#### Potential Health Effects:

**Inhalation:** Inhalation of mists may cause respiratory tract irritation and coughing.

**Skin Contact:** May cause mild skin irritation with redness.

**Eye Contact:** Causes eye irritation with tearing, redness and pain.



**Ingestion:** Ingestion may cause gastrointestinal irritation and nausea.

**Mutagenicity:** None of the components have shown mutagenic activity.

**Carcinogenicity:** None of the components are listed as a carcinogen or potential carcinogen by IARC, NTP, ACGIH, or OSHA.

**Developmental / Reproductive Toxicity:** None of the components have been shown to cause reproductive or developmental effects.

**Acute Toxicity Values:** Estimated Acute Toxicity (ATE) Oral: 77519 mg/kg, Dermal >2,000 mg/kg, Inhalation 27 mg/L/ 4 hr  
Diethylene Glycol Monobutyl Ether: Oral rat LD50 3306 mg/kg, Dermal rabbit LD50 >2764 mg/kg  
Alkyl (68% C<sub>12</sub>, 32% C<sub>14</sub>) dimethyl ethylbenzyl ammonium chlorides: Oral rat LD50 >500 mg/kg, Dermal rabbit LD50 >2000 mg/kg, Inhalation rat LC50 0.054-0.51 mg/L  
Alkyl (60% C<sub>14</sub>, 30% C<sub>16</sub>, 5% C<sub>12</sub>, 5% C<sub>18</sub>) dimethyl benzyl ammonium chlorides: Oral rat LD50 >500 mg/kg, Dermal rabbit LD50 >2000 mg/kg, Inhalation rat LC50 0.054-0.51 mg/L

## Section 12. Ecological Information

**Toxicity:** No toxicity data available for product

Diethylene Glycol Monobutyl Ether: 96 hr LC50 *Lepomis macrochirus* 1300 mg/L, 48 hr EC50 *daphnia magna* >100 mg/L, 72 hr EC50 *Pseudokirchnerella subcapitata* 1101 mg/L  
n alkyl (68% C<sub>12</sub>, 32% C<sub>14</sub>) dimethyl ethylbenzyl ammonium chloride: 96 hr *Pimephales promelas* 1.4 mg/L mg/L, 48 hr EC50 *daphnia magna* 0.016 mg/L, 96 hr EC50 green algae 0.063 mg/L  
alkyl (C<sub>12</sub>-18) dimethyl benzyl ammonium chloride: 96 hr *Pimephales promelas* 1.4 mg/L mg/L, 48 hr EC50 *daphnia magna* 0.016 mg/L, 96 hr EC50 green algae 0.063 mg/L

**Persistence and Degradability:** Diethylene Glycol Monobutyl Ether, alkyl (68% C<sub>12</sub>, 32% C<sub>14</sub>) dimethyl ethylbenzyl ammonium chloride and alkyl (C<sub>12</sub>-18) dimethyl benzyl ammonium chloride are readily biodegradable.

**Bioaccumulative Potential:** Diethylene Glycol Monobutyl Ether has a BCF of 3.

**Mobility in Soil:** Diethylene Glycol Monobutyl Ether is highly mobile in soil.

**Other Adverse Effects:** None known.

## Section 13. Disposal Considerations

**Solution Disposal:** 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 the nearest EPA Regional Office for guidance.

**Container Disposal:** Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Fill container ¼ full with water and recap. Agitate vigorously. Follow Pesticide Disposal instructions for rinsate disposal. Drain for 10 seconds after flow begins to drip. Repeat procedure two more times. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill.



**Section 14. Transport Information**

	UN Number	UN Proper Shipping Name	Transport Hazard Class(es)	Packing Group	Environmental Hazards
US DOT	None	Not Regulated	None	None	None
EU ADR/RID	None	Not Regulated	None	None	None
IMDG	None	Not Regulated	None	None	None
IATA/ICAO	None	Not Regulated	None	None	None

**Transport in Bulk According to Annex III MARPOL 73/78 and the IBC Code:** Not applicable – product is transported only in packaged form.

**Special Precautions for User:** None identified

**Section 15. Regulatory Information**

**U.S. FEDERAL REGULATIONS:**

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**  
**CAUTION**  
**PRECAUTIONARY STATEMENTS**  
**Hazards to Humans & Domestic Animals**

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. DO NOT CONTAMINATE WATER, FOOD, OR FEED BY STORAGE OR DISPOSAL.

**US Regulations**

**EPA SARA 311/312 Hazard Classification:** Acute Health

**EPA SARA 313:** This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372):

Glycol ether (Diethylene Glycol Monobutyl Ether)	112-34-5	1-10%
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**Protection of Stratospheric Ozone:** This product is not known to contain or to have been manufactured with ozone depleting substances as defined in 40 CFR Part 82, Appendix A to Subpart A.

**CERCLA SECTION 103:** This product is not subject to CERCLA reporting requirements; however, many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

**California Proposition 65:** This product does not contain chemicals regulated under California Proposition 65.

**International Inventories**

**US EPA TSCA Inventory:** This product is an EPA registered product so it is exempt from TSCA.

<b>16. Other Information</b>
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NFPA Rating: Flammability: 0

Health: 1

Instability: 0

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.

**Effective Date:** August 12, 2015

**Supersedes Date:** New SDS

**Revision Summary:** New SDS