Safety Data Sheet
Micro-Kill One Germicidal Alcohol Wipes

Section 1. Identification

Product Identifier  Micro-Kill One Germicidal Alcohol Wipes
Synonyms  MSC351300; MSC351310; MSC351320; MSC351378; MSD_SDS0224
Manufacturer Stock Numbers  MSC351300; MSC351310; MSC351320; MSC351378
Recommended use  Disinfectant
Uses advised against  N/A
Manufacturer Contact Address  Medline
3 Lakes Drive
Northfield, IL, 60093
USA

Phone  (800) 633-5463
Emergency Phone  (800) 424-9300
Fax  (847) 643-4436
CHEMTREC

Website  www.Medline.com

Section 2. Hazards Identification

Classification  ACUTE TOXICITY - INHALATION - Category 4
               FLAMMABLE LIQUIDS - Category 2
               SERIOUS EYE DAMAGE / EYE IRRITATION - Category 2A
               SPECIFIC TARGET ORGAN TOXICITY (Single Exposure) - Category 3
Signal Word  Danger
Pictogram

Hazard Statements
- Causes serious eye irritation
- Harmful if inhaled
- Highly flammable liquid and vapor
- May cause respiratory irritation; or May cause drowsiness or dizziness

Precautionary Statements

Response
- Call a poison center/doctor if you feel unwell.
- If eye irritation persists: Get medical advice/attention.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- In case of fire: Use appropriate media to extinguish.

Prevention
- Ground/bond container and receiving equipment.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
- Keep container tightly closed.
- No Smoking.
- Take precautionary measures against static discharge.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.

Storage
- Keep container tightly closed.
- Store in a well-ventilated place. Keep cool.
- Store locked up.

Disposal
- Dispose of contents/container according to local/regional/national/international regulations.

Ingredients of unknown toxicity
0%

Hazards not Otherwise Classified
No Data Available

Section 3. Ingredients

<table>
<thead>
<tr>
<th>CAS</th>
<th>Ingredient Name</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>Ethanol</td>
<td>72.5 %</td>
</tr>
<tr>
<td>7173-51-5</td>
<td>Didecyl dimethyl ammonium chloride</td>
<td>0.33 %</td>
</tr>
</tbody>
</table>

Occupational exposure limits, if available, are listed in Section 8.
Section 4. First-Aid Measures

Inhalation:
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact:
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

Eye Contact:
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.

Ingestion:
Rinse mouth. Do not induce vomiting. Get medical attention if symptoms occur. Never give anything by mouth if victim is unconscious or is convulsing. Obtain medical attention.

Most important symptoms/effects, acute and delayed:
Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea.

Indication of immediate medical attention and special treatment needed:
Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Symptoms may be delayed.

General information:
Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Keep away from sources of ignition. No smoking. Avoid contact with eyes and skin. Wear safety glasses with side shields. Protective gloves recommended based on infection control best practices. Keep out of reach of children.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media
Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media
Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical:
Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed. Firefighters should wear a self-contained breathing apparatus.

Special protective equipment and precautions for firefighters:
Firefighters should wear full protective clothing including self-contained breathing apparatus.

Fire fighting equipment/instructions:
In case of fire and/or explosion do not breathe fumes. 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: Solid containing flammable liquid
Hazardous combustion products:
May include and are not limited to: Oxides of carbon.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures:
Immediately evacuate personnel to safe areas. Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Remove all possible sources of ignition in the surrounding area. Wear appropriate protective equipment and clothing during clean-up. Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors or mists. Avoid inhalation of vapors. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. 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:
Pick up and discard. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Take precautionary measures against static discharge. Use only non-sparking tools. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills:
Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small Spills:
Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

Section 7. Handling and Storage

Precautions for safe handling:
Vapors may form explosive mixtures with air. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Do not smoke. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote
accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Use only with adequate ventilation. Avoid breathing vapor. Avoid contact with eyes, skin and clothing. Avoid prolonged exposure. Use only outdoors or in a well-ventilated area. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Wash thoroughly after handling. Keep container tightly closed. When using do not eat or drink.

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Avoid spark promoters. Eliminate sources of ignition. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a closed container away from incompatible materials. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

PESTICIDE STORAGE: Always store this product and all pesticides in the original container. If a leaky container must be contained within another, mark the outer container to identify the contents. Protect from extreme heat or cold.

### Section 8. Exposure Controls/Merhcantual Protection

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>STEL: 1,000 ppm TWA: 1,000 ppm 1,900 mg/m³</td>
<td>29 CFR 1910.1000 Table Z-1 Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Didecyl dimethyl ammonium chloride</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

### Personal Protective Equipment

<table>
<thead>
<tr>
<th>Engineering Controls</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Protection:</td>
<td>None required for normal use. For prolonged exposure, use appropriate goggles, protective clothing and gloves.</td>
</tr>
<tr>
<td>Hand Protection:</td>
<td>Protective gloves: Not required</td>
</tr>
<tr>
<td>Skin and Body Protection:</td>
<td>As required by employer code.</td>
</tr>
<tr>
<td>Respiratory Protection:</td>
<td>None required under normal use conditions.</td>
</tr>
<tr>
<td>Work/hygienic practices:</td>
<td>Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Safety shower and eye wash should be available close to work areas.</td>
</tr>
</tbody>
</table>
Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Pre-saturated wipe</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless clear liquid saturated on wipe</td>
</tr>
<tr>
<td>Odor</td>
<td>Alcohol</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N.A.</td>
</tr>
<tr>
<td>Solubility</td>
<td>N.A.</td>
</tr>
<tr>
<td>Partition coefficient Water/n-octanol</td>
<td>N.A.</td>
</tr>
<tr>
<td>VOC%</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>3.23 cSt @ 20°C (68°F)</td>
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<tr>
<td>Specific Gravity</td>
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<tr>
<td>Density lbs/Gal</td>
<td>0.86</td>
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<tr>
<td>Pounds per Cubic Foot</td>
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<tr>
<td>Flash Point</td>
<td>18.5°C (65.3°F)</td>
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<td>FP Method</td>
<td>Tag Closed Cup</td>
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<tr>
<td>pH</td>
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<td>Melting Point</td>
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<tr>
<td>Boiling Point</td>
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<tr>
<td>Boiling Range</td>
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<tr>
<td>LEL</td>
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<tr>
<td>UEL</td>
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<tr>
<td>Evaporation Rate</td>
<td>N.A.</td>
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<tr>
<td>Flammability</td>
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<tr>
<td>Decomposition Temperature</td>
<td>N.A.</td>
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<tr>
<td>Auto-ignition Temperature</td>
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</tr>
<tr>
<td>Vapor Pressure</td>
<td>N.A.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

Reactivity: This product may react with strong oxidizing agents.
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.
Chemical stability: Stable under recommended storage conditions.
Conditions to avoid: Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Do not mix with other chemicals.
Incompatible materials: Strong oxidizing agents.
Hazardous Decomposition Products: May include and are not limited to: oxides of carbon.
Section 11. Toxicological Information

Routes of exposure: Eye, Skin contact, Inhalation, Ingestion.

Information on likely routes of exposure:

Ingestion:
May cause stomach distress, nausea or vomiting.

Inhalation:
Vapors have a narcotic effect and may cause headache, fatigue, dizziness and
nausea. Harmful if inhaled. Prolonged inhalation may be harmful.

Skin contact:
No adverse effects due to skin contact are expected. Non-irritating based on
test data.

Eye contact:
Moderate eye irritation

Symptoms related to the physical, chemical and toxicological characteristics:

Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Acute Toxicity:

Harmful if inhaled. Narcotic effects. May cause respiratory irritation.

Component:
Ethanol (CAS-No. 64-17-5)

Dermal LD50
Rabbit
> 15800 mg/kg, SiDS initial assessment report

Inhalation LC50
Cat
85.4 mg/L, 4.5 Hours, ECHA
43.7 mg/L, 6 Hours, ECHA
Mouse
> 60000 ppm, 60 Minutes, ECHA
79.4 mg/L, 134 Minutes, ECHA
Rat
> 115.9 mg/L, 4 Hours, ECHA
31623 ppm, 4 Hours, HMIRA
20000 ppm, 10 Hours, HSDB
51.3 mg/L, 6 Hours, ECHA

Oral LD50
Dog
5.5 g/kg, HSDB
Guinea pig
5600 mg/kg, HSDB
Monkey
6000 mg/kg
Mouse
10500 ml/kg, ECHA
3450 mg/kg, SAX
Pig
Component:
Didecyl dimethyl ammonium chloride (CAS-No. 7173-51-5)

Dermal LD50
Rabbit
500 mg/kg
Rat
> 1000 mg/kg

Inhalation LC50
Not Available

Oral LD50
Mouse
268 mg/kg
Rat
329 mg/kg

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

Serious eye damage/eye irritation:
Causes serious eye irritation.

Respiratory/Skin Sensitization:
Respiratory Sensitization:
N.A.

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

Mutagenicity:
Non-hazardous by WHMIS/OSHA criteria.

Reproductive toxicity:
Not available.

Teratogenicity:
Non-hazardous by WHMIS/OSHA criteria.

Specific Target Organ Toxicity - Single Exposure:
Respiratory tract irritation. Narcotic effects.

Specific Target Organ Toxicity - Repeated Exposure:
Not classified.

Aspiration hazard:
Not available.

Chronic effects:
Prolonged inhalation may be harmful.

Section 12. Ecological Information

Ecotoxicological data:
Component
Ethanol (CAS-No. 64-17-5)

Crustacea EC50
Daphnia: 11744.5 mg/L, 48 Hours

Aquatic
Crustacea EC50
Water flea (Daphnia magna): 7.7 - 11.2 mg/L, 48 hours
Fish LC50
Fathead minnow (Pimephales promelas): > 100 mg/L, 96 hours

Component
Didecyl dimethyl ammonium chloride (CAS-No. 7173-51-5)

Aquatic
Fish LC50
White sturgeon (Acipenser transmontanus): 0.001 - 0.01 mg/L, 96 hours

Persistence/degradability: No data is available on the degradability of this product.
Bioaccumulative potential: No data available.
Mobility in soil: No data available.
Mobility in general: Not 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

Disposal instructions: Do not contaminate water, food or feed by storage or disposal.

PESTICIDE DISPOSAL: Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available, or discard empty container in trash.

CONTAINER DISPOSAL: Refillable container. Refill plastic canister with this brand of pesticide product only. Do not reuse this container for any other purpose. Offer plastic container for recycling if available, or discard in trash.

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Incinerate the material under controlled conditions in an approved incinerator. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. If discarded, this product is considered a RCRA ignitable waste, D001. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations: Dispose in accordance with all applicable regulations.
Hazardous waste code: D001: Waste Flammable material with a flash point <140 F
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: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.
Section 14. Transport Information

<table>
<thead>
<tr>
<th>UN Number</th>
<th>3175</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN Proper Shipping Name</td>
<td>Solids containing flammable liquid, n.o.s. (Ethanol)</td>
</tr>
<tr>
<td>DOT Classification</td>
<td>4.1</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
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<tr>
<td>IMDG - UN Number:</td>
<td>3175</td>
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<td>IMDG - Packing Group:</td>
<td>II</td>
</tr>
<tr>
<td>IATA - UN Number:</td>
<td>3175</td>
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<tr>
<td>IATA - UN Proper Shipping Name:</td>
<td>Solids containing flammable liquid, n.o.s. (Ethanol)</td>
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<td>IATA - Hazard Class:</td>
<td>4.1</td>
</tr>
<tr>
<td>IATA - Packing Group:</td>
<td>II</td>
</tr>
</tbody>
</table>

Section 15. Regulatory Information

This is a registered EPA product. The product labeling is in compliance with EPA regulations and guidelines. This chemical is a disinfectant 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-disinfectant chemicals. The hazard information required on the disinfectant label is reproduced below. The disinfectant label also includes other important information, including directions for use.

EPA Registration number: 88494-2-37549

PRECAUTIONARY STATEMENTS:
Hazards to humans and Domestic animals.
CAUTION: Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating and drinking, chewing gum, using tobacco or using toilet. Flammable. Keep away from heat or open flame.

SARA 311/312: Refer to Section 2 of the SDS.
SARA 302: N.A.
SARA 304: N.A.
SARA 313: N.A.
TSCA: All components are listed or exempt.
CERCLA Hazardous Substance List: N.A.
Clean Air Act (CAA) Section 112, 112 (r): N.A.
New Jersey Right to Know Components: ETHYL ALCOHOL.
Massachusetts Right to Know Components: ETHYL ALCOHOL.
Pennsylvania Right to Know Components: ETHANOL.
Rhode Island Right to Know Components: ethyl alcohol.

## Section 16. Other Information

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>11/21/2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legend</td>
<td>N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined</td>
</tr>
<tr>
<td>HMIS (U.S.A.): Health</td>
<td>1</td>
</tr>
<tr>
<td>HMIS (U.S.A.): Flammability</td>
<td>3</td>
</tr>
<tr>
<td>HMIS (U.S.A.): Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>HMIS (U.S.A.): Personal Protection</td>
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<tr>
<td>National Fire Protection Association (U.S.A): Health Hazard</td>
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</tr>
<tr>
<td>National Fire Protection Association (U.S.A): Flammability</td>
<td>3</td>
</tr>
<tr>
<td>National Fire Protection Association (U.S.A): Reactivity</td>
<td>0</td>
</tr>
<tr>
<td>Additional Information:</td>
<td>The information contained herein is furnished without warranty or legal responsibility of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees.</td>
</tr>
</tbody>
</table>