

# SAFETY DATA SHEET

Confirms to OSHA Hazard Communication Standard (CFR 29 1910.1200) HazCom 2012



Product: MICRO-CIDE<sup>28</sup> HLD 3% Glutaraldehyde – MC28-04-128

Revision Date: 03-Apr-2015

## SECTION 1 – IDENTIFICATION

### Product Identifier

Product Name: MICRO-CIDE<sup>28</sup> HLD 3% Glutaraldehyde

Product Code: MC28-04-128

### Recommended Use of the Chemical and Restrictions for Use

Recommended Use: Disinfectant

Restrictions for Use: Use only as directed.

### Details of the Supplier

Manufacturer: Micro-Scientific Industries  
755 Tri-State Parkway  
Gurnee, IL 60031  
888-253-2536

### Emergency Phone Number

24-Hour Number: 1-800-535-5053

International: 1-352-323-3500

## SECTION 2 – HAZARDS IDENTIFICATION

### Classification

Hazard Class	Category
Acute toxicity (inhalation)	3
Skin irritation	2
Serious eye damage	1
Respiratory sensitization	1
Skin sensitization	1
Specific target organ toxicity- Single exposure	3

### Label Elements

#### Hazard Symbols(s):



Signal Word(s): Danger

**Hazard Statement(s):** Toxic if inhaled. Causes skin irritation. Causes serious eye damage. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction. May cause respiratory irritation.

**Precautionary Statement(s):** Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing must not be allowed out of the workplace. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor. If on skin: Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: 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. Immediately call a poison center/doctor. Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/containers in accordance with local/regional/national/international regulations.

### Other Hazards

None.

## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Wt %
Glutaraldehyde	111-30-8	3

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The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## SECTION 4 – FIRST AID MEASURES

### First Aid Measures

**Inhalation:** If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention.

**Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

**Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

**Skin:** In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

### Most Important Symptoms and Effects (Acute and Delayed)

**Inhalation:** May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory tract irritation.

**Eye Contact:** Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. May cause burns.

**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

**Skin:** Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause sensitization by skin contact.

### Indication of any Immediate Medical Attention and Special Treatment Needed

**Note to Physician:** Treat symptomatically.

## SECTION 5 – FIRE FIGHTING MEASURES

### Extinguishing Media

**Suitable:** Treat for surrounding material.

**Unsuitable:** None known.

### Specific Hazards Arising from Chemical

Products of combustion include but are not limited to: oxides of carbon.

### Protective Equipment and Precautions for Firefighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

**Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental Precautions:** See Section 12 for ecological information.

### Methods and Material for Containment and Cleaning Up

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Scoop up material and place in a disposal container. Provide ventilation.

## SECTION 7 – HANDLING AND STORAGE

### Precautions for Safe Handling

**Handling:** Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only outdoors or in a well-ventilated area.

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**General Hygiene Advice:** Launder contaminated clothing before use. Wash hands before eating, drinking, or smoking.

## **Conditions for Safe Storage, Including any Incompatibilities**

**Storage Conditions:** Keep out of the reach of children. Keep container tightly closed. Store in well-ventilated place. Keep from freezing.

**Incompatible Materials:** None known.

## **SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

#### **Exposure Guidelines:**

<b>Chemical Name</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>NIOSH IDLH</b>
Glutaraldehyde (111-30-8)	0.05 ppm (activated and inactivated)	Not available	Not available

### **Appropriate Engineering Controls**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

### **Individual Protection Measures**

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Skin and Body Protection:** Wear suitable protective clothing.

**Eye/Face Protection:** Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

**General Work/Hygienic Practices:** Handle in accordance with good industrial hygiene and safety practice.

## **SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Colorless liquid

**Odor:** Lemon

**Odor threshold:** Not determined

**pH:** 4.0

**Melting point/freezing point:** Not determined

**Initial boiling point and boiling range:** Not determined

**Flash point:** Not determined

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Not determined

**Upper/lower flammability or explosive limits:** Not determined

**Vapor pressure:** Not determined

**Vapor density:** Not determined

**Relative density:** 1.01

**Solubility(ies):** Not determined

**Partition coefficient (n-octanol/water):** Not determined

**Auto-ignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Viscosity:** Not determined

## **SECTION 10 – STABILITY AND REACTIVITY**

**Reactivity:** Not reactive under normal conditions.

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**Product:** MICRO-CIDE<sup>28</sup> HLD 3% Glutaraldehyde – MC28-04-128

**Revision Date:** 03-Apr-2015

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** None under normal use.

**Conditions to avoid:** Heat. Incompatible materials.

**Incompatible materials:** None known.

**Hazardous decomposition products:** May include and are not limited to: oxides of carbon.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

**Likely Routes of Exposure:** Inhalation, skin contact, eye contact, ingestion

### Information Related to Physical, Chemical, and Toxicological Effects

See section 4 of this SDS.

### Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

**Carcinogenicity:** NTP: No IARC: No OSHA: No

### Numerical Measures of Toxicity

Product	
ATE (oral)	>2000 mg/kg, rat
ATE (dermal)	>2000 mg/kg, rabbit
ATE (inhalation)	>2.0 but ≤10.0 mg/l, rat

### **Component Information:**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Glutaraldehyde (111-30-8)	252 mg/kg (rat)	>2000 mg/kg (rabbit)	0.224 mg/l/4h (rat)

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** Not established

**Persistence and degradability:** Not established

**Bioaccumulative potential:** Not established

**Mobility in soil:** Not established

**Other adverse effects:** No additional information available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

See section 8 of this SDS for exposure controls and personal protection.

Dispose of the product and container in accordance with all applicable local, state, and federal regulations.

## SECTION 14 – TRANSPORT INFORMATION

**Note:** Classification changes based on quantity, packaging, and method of shipment. See current shipping paper for most up to date shipping information.

**DOT (Ground):** Not regulated

**IATA (Air):** Not regulated

**IMDG (Vessel):** Not regulated

## SECTION 15 – REGULATORY INFORMATION

All ingredients in this product are listed or are excluded from listing on the US Toxic Substances Act (TSCA) Chemical Substance Inventory.

## SECTION 16 – OTHER INFORMATION

**Issue Date:** 03-Apr-2015

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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 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 designed and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

# SAFETY DATA SHEET

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Product: MICRO-CIDE<sup>28</sup> HLD 3% Glutaraldehyde Activator – MC28-04-128

Revision Date: 02-Apr-2015

## SECTION 1 – IDENTIFICATION

### Product Identifier

Product Name: MICRO-CIDE<sup>28</sup> HLD 3% Glutaraldehyde Activator

Product Code: MC28-04-128

### Recommended Use of the Chemical and Restrictions for Use

Recommended Use: Activator for 3% Glutaraldehyde

Restrictions for Use: Use only as directed.

### Details of the Supplier

Manufacturer: Micro-Scientific Industries  
755 Tri-State Parkway  
Gurnee, IL 60031  
888-253-2536

### Emergency Phone Number

24-Hour Number: 1-800-535-5053

International: 1-352-323-3500

## SECTION 2 – HAZARDS IDENTIFICATION

### Classification

Hazard Class	Category
Germ cell mutagenicity	2

### Label Elements

Hazard Symbols(s):



Signal Word(s): Warning

Hazard Statement(s): Suspected of causing genetic defects.

Precautionary Statement(s): Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection. If exposed or concerned: Get medical advice/attention. Store locked up. Dispose of contents/containers in accordance with local/regional/national/international regulations.

### Other Hazards

None

## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Wt %
Methanesulfonic acid, hydroxy-, monosodium salt, dihydrate	6035-47-8	30-60
Disodium carbonate	497-19-8	0.5-1.5

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

## SECTION 4 – FIRST AID MEASURES

### First Aid Measures

**Inhalation:** If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

**Eye Contact:** In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

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**Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

**Skin:** If irritation occurs, flush skin with plenty of water. Get medical attention if irritation persists.

## **Most Important Symptoms and Effects (Acute and Delayed)**

**Inhalation:** May cause respiratory tract irritation.

**Eye Contact:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

**Skin:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

## **Indication of any Immediate Medical Attention and Special Treatment Needed**

**Note to Physician:** Treat symptomatically.

## **SECTION 5 – FIRE FIGHTING MEASURES**

### **Extinguishing Media**

**Suitable:** Treat for surrounding material.

**Unsuitable:** None known.

### **Specific Hazards Arising from Chemical**

Products of combustion include, and are not limited to: oxides of carbon.

### **Protective Equipment and Precautions for Firefighters**

Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## **SECTION 6 – ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment, and Emergency Procedures**

**Personal Precautions:** Use personal protection recommend in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental Precautions:** See Section 12 for ecological information.

### **Methods and Material for Containment and Cleaning Up**

Contain spill, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Vacuum or sweep material and place in a disposal container.

## **SECTION 7 – HANDLING AND STORAGE**

### **Precautions for Safe Handling**

**Handling:** Avoid contact with skin and eyes. Avoid breathing dust. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.

**General Hygiene Advice:** Launder contaminated clothing before use. Wash hands before eating, drinking, or smoking.

### **Conditions for Safe Storage, Including any Incompatibilities**

**Storage Conditions:** Keep container out of the reach of children. Keep container tightly closed.

**Incompatible Materials:** None known.

## **SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Control Parameters**

#### **Exposure Guidelines:**

<b>Chemical Name</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>NIOSH IDLH</b>
Methanesulfonic acid, hydroxy-, monosodium salt, dihydrate (6035-47-8)	Not available	Not available	Not available
Disodium carbonate (497-19-8)	Not available	Not available	Not available

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## Appropriate Engineering Controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

## Individual Protection Measures

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

**Skin and Body Protection:** Wear suitable protective clothing.

**Eye/Face Protection:** Safety glasses or goggles are recommended when using product.

**General Work/Hygienic Practices:** Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Yellow powder solid

**Odor:** Mild

**Odor threshold:** Not determined

**pH:** 9.0 (5% solution)

**Melting point/freezing point:** Not determined

**Initial boiling point and boiling range:** Not determined

**Flash point:** Not determined

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Not determined

**Upper/lower flammability or explosive limits:** Not determined

**Vapor pressure:** Not determined

**Vapor density:** Not determined

**Relative density:** Not determined

**Solubility(ies):** Not determined

**Partition coefficient (n-octanol/water):** Not determined

**Auto-ignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Viscosity:** Not determined

## SECTION 10 – STABILITY AND REACTIVITY

**Reactivity:** Not reactive under normal conditions.

**Chemical stability:** Stable under recommended storage conditions.

**Possibility of hazardous reactions:** None under normal use.

**Conditions to avoid:** Heat. Incompatible materials.

**Incompatible materials:** None known.

**Hazardous decomposition products:** May include and are not limited to: oxides of carbon.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

**Likely Routes of Exposure:** Inhalation, skin contact, eye contact, ingestion

### Information Related to Physical, Chemical, and Toxicological Effects

See section 4 of this SDS.

### Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

**Carcinogenicity:** NTP: No IARC: No OSHA: No



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## Numerical Measures of Toxicity

Product	
ATE (oral)	>2000 mg/kg, rat
ATE (dermal)	Not available
ATE (inhalation)	Not available

## Component Information:

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methanesulfonic acid, hydroxy-, monosodium salt, dihydrate (6035-47-8)	4000 mg/kg (mouse)	Not available	Not available
Disodium carbonate (497-19-8)	4090 mg/kg (rat)	2210 mg/kg (mouse)	2300 mg/m <sup>3</sup> /2h (rat)

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** Not established

**Persistence and degradability:** Not established

**Bioaccumulative potential:** Not established

**Mobility in soil:** Not established

**Other adverse effects:** No additional information available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

See section 8 of this SDS for exposure controls and personal protection.

Dispose of the product and container in accordance with all applicable local, state, and federal regulations.

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**DOT (Ground):** Not regulated

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**IMDG (Vessel):** Not regulated

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## SECTION 16 – OTHER INFORMATION

**Issue Date:** 02-Apr-2015

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**End of Safety Data Sheet**