

Issue Date: 04-Mar-2008

Revision Date: 05-Sep-2014

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name United 309 MICROBIOCIDE

Other means of identification

SDS # UNITED-309

Registration Number(s) EPA Reg. No. 1448-283-9250

Recommended use of the chemical and restrictions on use

Recommended Use Microbiocide for cooling towers and air washers.

Uses Advised Against For industrial and institutional use only.

Details of the supplier of the safety data sheet

Supplier Address

United Laboratories, Inc.
320 37th Avenue
St. Charles, IL 60174
www.unitedlabsinc.com
www.unitedlabsinc.ca

Emergency Telephone Number

Company Phone Number 800-323-2594 (to reorder)
Emergency Telephone (24 hr) INFOTRAC 1-800-535-5053 (North America)
1-352-323-3500 (International)

2. HAZARDS IDENTIFICATION

Appearance Clear, green liquid

Physical State Liquid

Odor Ammonium sulfide odor

Classification

| | |
|-----------------------------------|------------|
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

Immediately call a poison center or doctor/physician. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician. If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. If swallowed: Rinse mouth. Do not induce vomiting.

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

Unknown Acute Toxicity

10% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No | Weight-% |
|-----------------------------------|----------|----------|
| Potassium dimethyldithiocarbamate | 128-03-0 | 1-10 |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

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|-----------------------|--|
| General Advice | Immediately call a poison center or doctor/physician. |
| Eye Contact | Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. Immediately call a poison center or doctor/physician. |
| Skin Contact | Take off contaminated clothing and wash it before reuse. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. |
| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. If not breathing, give artificial respiration. |
| Ingestion | Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Never give anything by mouth to a person who is unconscious or convulsing. |

Most important symptoms and effects

| | |
|-----------------|---|
| Symptoms | Causes severe skin burns and eye damage. Prolonged breathing of vapors may cause dizziness and/ or nausea. May cause upset stomach, nausea. |
|-----------------|---|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray (fog). Dry chemical. Foam. Carbon dioxide (CO₂).

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Heating may cause release of hazardous fumes such as sulfur.

Hazardous Combustion Products

When strongly heated, as in a fire, this product may produce oxides of sulfur, nitrogen and carbon.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Use personal protective equipment as required.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Leaking or damaged drums should be placed in over-pack drums for disposal.

Methods for Clean-Up Small spills: Absorb spills with sawdust or sand. Place in corrosion resistant container for proper disposal. Large spills: Absorb spills with sawdust or sand. Place in corrosion resistant container for proper disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection. Wash contaminated clothing before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store locked up. Keep this product in a properly labeled, tightly closed container.

Incompatible Materials Strong acids. Oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls Provide adequate ventilation and local exhaust is generally adequate.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|---|
| Eye/Face Protection | Chemical safety goggles are recommended. |
| Skin and Body Protection | Chemical resistant gloves are recommended. Shirts with long sleeves. |
| Respiratory Protection | None required if good ventilation is maintained. If TLV is exceeded, use a NIOSH/ MSHA approved respirator. |
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | |
|-------------------------------------|---------------------------|-------------------------|
| Physical State | Liquid | |
| Appearance | Clear, green liquid | |
| Color | Clear green | |
| Odor | Ammonium sulfide odor | |
| Property | Values | Remarks • Method |
| pH | 11.5-12.5 | |
| Melting Point/Freezing Point | No information available. | |
| Boiling Point/Boiling Range | >100 °C / >212 °F | |
| Flash Point | >100 °C / >212 °F | TCC |
| Evaporation Rate | No information available. | |
| Flammability (Solid, Gas) | Liquid-Not applicable | |
| Upper Flammability Limits | No information available. | |
| Lower Flammability Limit | No information available. | |
| Vapor Pressure | No information available. | |
| Vapor Density | No information available. | |
| Specific Gravity | 1.05 | (Water = 1) |
| Water Solubility | Completely soluble | |
| Solubility in other solvents | No information available. | |
| Partition Coefficient | No information available. | |
| Auto-ignition Temperature | No information available. | |
| Decomposition Temperature | No information available. | |
| Kinematic Viscosity | No information available. | |
| Dynamic Viscosity | No information available. | |
| Explosive Properties | No information available. | |
| Oxidizing Properties | No information available. | |
| VOC Content | None. | |

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous polymerization will not occur.

Conditions to Avoid

Extreme temperatures. Incompatible Materials.

Incompatible Materials

Strong acids. Oxidizers.

Hazardous Decomposition Products

Carbon disulfide and dimethylamine may be generated upon acidification. Thermal degradation may generate vapors of hydrogen sulfide. Contact with fire or strong oxidants may generate oxides of sulfur, nitrogen and carbon.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

| | |
|---------------------|---------------------------|
| Eye Contact | Causes severe eye damage. |
| Skin Contact | Causes severe skin burns. |
| Inhalation | Do not inhale. |
| Ingestion | Do not ingest. |

Component Information**Information on physical, chemical and toxicological effects**

| | |
|-----------------|--|
| Symptoms | Please see section 4 of this SDS for symptoms. |
|-----------------|--|

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|------------------------|--|
| Carcinogenicity | This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |
|------------------------|--|

Numerical measures of toxicity

No information available.

| | |
|-------------------------------|---|
| Unknown Acute Toxicity | 10% of the mixture consists of ingredient(s) of unknown toxicity. |
|-------------------------------|---|

12. ECOLOGICAL INFORMATION**Ecotoxicity**

No information available.

Persistence/Degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Other Adverse Effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

| | |
|-------------------------------|---|
| Disposal of Wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated Packaging | Disposal should be in accordance with applicable regional, national and local laws and regulations. |

14. TRANSPORT INFORMATION

| | |
|--------------------|----------------|
| <u>DOT</u> | Not regulated. |
| <u>IATA</u> | Not regulated. |
| <u>IMDG</u> | Not regulated. |

15. REGULATORY INFORMATION

International Inventories

| | |
|-------------|--------|
| TSCA | Listed |
|-------------|--------|

Legend:

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

US Federal Regulations

SARA 313

| Chemical Name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|--|----------|----------|-------------------------------|
| Potassium dimethyldithiocarbamate - 128-03-0 | 128-03-0 | 1-10 | 1.0 |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals.

| Chemical Name | California Proposition 65 |
|--|---------------------------|
| Potassium dimethyldithiocarbamate - 128-03-0 | Developmental |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---|------------|---------------|--------------|
| Potassium dimethyldithiocarbamate 128-03-0 | X | | |

16. OTHER INFORMATION

| | | | | |
|--------------------|--------------------------|--------------------------|--------------------------|----------------------------|
| <u>NFPA</u> | Health Hazards | Flammability | Instability | Special Hazards |
| | No information available | No information available | No information available | No information available |
| <u>HMIS</u> | Health Hazards | Flammability | Physical Hazards | Personal Protection |
| | 2 | 0 | 1 | 0 |

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 Revision Note: New format

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 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.

End of Safety Data Sheet