**BUSEN 1059**

**KEEP OUT OF REACH OF CHILDREN**

**DANGER**

Precautionary Statements

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

<table>
<thead>
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<th>FIRST AID</th>
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<tr>
<td><strong>Eyes</strong></td>
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<tr>
<td>- Hold eye open and rinse slowly and gently with water for 15-20 minutes.</td>
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<tr>
<td>- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</td>
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<tr>
<td>- Call a poison control center or doctor for further treatment advice.</td>
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| **Skin** |
| - Take off contamination clothing. |
| - Rinse skin immediately with plenty of water for 15-20 minutes. |
| - Call a poison control center or doctor for further treatment advice. |

| **Inhalation** |
| - Call a poison control center or doctor for further treatment advice. |

| **INGESTION** |
| - If on skin or clothing, avoid contaminating and gently wash with soap and water. |
| - If on skin, rinse skin with soap and water. |
| - If in eyes, rinse slowly and gently with water for 15-20 minutes. |
| - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. |
| - If swallowed, immediately give 2-3 glasses of water. If person is not breathing, call 911 or an ambulance, then give artificial respiration. Never give mouth-to-mouth if possible. |
| - Call a poison control center or doctor for further treatment advice. |

**NOT A NUMBER**

If have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. You may also contact 961-278-5330 or 1-800-BUCKMAN for emergency medical treatment information.

**NOTE TO PHYSICIAN**

Probable medical damage may involve the gastric and hepatic regions.

**DANGER**

Corrosive. Causes eye damage and severe skin irritation. Harmful if swallowed or inhaled. Avoid contact with skin, eyes, or clothing. Wear protective clothing. Wash thoroughly with soap and water for prolonged contact.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, ditches, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewage systems without prior notification to the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

**PHYSICAL/CHEMICAL HAZARDS**

Solubility in water: 0.2%. Melting Point: 106°C.

**ACTIVE INGREDIENTS:**

- Tetrahydro-3,5-diethyl-2H-1,3,5-thiadiazine-2-thione 98.0%

**INERT INGREDIENTS:**

- 3.0%

**TOTAL:**

100.0%

**Storage and Disposal**

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

**Pesticide Storage:**

Protect from temperatures in excess of 140 degrees F. Keep container closed when not in use. Contents are spilled or mixed due to consumer damage, collected and disposed of in accordance with state, local, and federal pesticide disposal regulations.

**Pesticide Disposal:**

Pesticide wastes are toxic. Improper disposal of excess pesticides, spray mixtures, or residue 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:**

Fiber drums with liners. Completely empty by sharing and topping drums bottom to lessen ringing particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

**For Use As An Antimicrobial In Oilfield Operations:**

FOR INDUSTRIALLY PREPARED WATER-BASED SUSPENSIONS (PIGMENT SLURRIES, ADHESIVES, POLYMERS, AND STARCHES) USE:

**For the Preservation of Clay slurries, adhesives, coatings and high viscosity suspensions:**

For preservation of clays, suspensions, and high viscosity suspensions, BUSEN 1059 should be added at a point in the processing system where there will be sufficient time and agitation for good mixing and dispersion. Add BUSEN 1059 at use levels of 0.1-1.0% by weight, based on the total formulation in slurries of starch, clay, calcium carbonate, or titanium dioxide; paper coatings, high viscosity suspensions (e.g., polymers, silica polymers, silica-polymer combinations); polyvinyl alcohol/polyethylene base additions; starch based adhesives; emulsion based adhesives. The exact amount of material to be added for the preservation of any given formulation will depend on the components and local storage time and conditions. Dosage rates should be determined by actual trial.

**For Oilfield Operations Use:**

**OILFIELD DRILLING MUDS AND WORKOVER OR COMPLETION FLUIDS: For control of slime formation and/or spoilage bacteria:**

Determine the total volume of circulating system. Calculate the number of pounds of BUSEN 1059 needed to produce a concentration of 0.2 ppm (0.01 lb/bbl) BUSEN 1059 in the drilling mud circulating system for example, 12 pounds of BUSEN 1059 per 1000 barrels of drilling fluid will produce the proper concentration. For best results, add BUSEN 1059 in a thin stream to the pit while the drilling fluid is circulating. As the total volume increases, due to greater well depth, add additional BUSEN 1059 to maintain the proper concentration. Because of the wide variation in drilling mud composition and bacterial contamination, greater or lesser amounts of the antimicrobial agent may be required.

**OILFIELD WATER TREATMENT AND WATER FLOODS: For control of slime formation and/or spoilage bacteria:**

Calculate the total volume of water to be treated. Using the volume, calculate the number of pounds of BUSEN 1059 needed to produce a concentration of 0.2 ppm (0.01 lb/bbl) BUSEN 1059. For example, 5.22 pounds of BUSEN 1059 per each 1000 gallons of total volume will produce this solution. For Water Soluble Packaging, for example, 1 pound of BUSEN 1059 per each 191 gallons of total volume will produce this solution.

To maintain bacterial control, 5.5 ppm BUSEN 1059 added each week is recommended. This may be accomplished by adding 0.73 pounds of BUSEN 1059 to each 1000 gallons of total volume. For Water Soluble Packaging, the may be accomplished by adding 1 pound of BUSEN 1059 to each 1363 gallons of total volume.

**Recirculating cooling water systems: For control of algae, fungi and slime forming bacteria:**

Dosages for recirculating cooling water systems will depend on the condition of the system prior to treatment installation. Systems which are heavily contaminated should be cleaned first. Apply BUSEN 1059 to the cleaned system when growth is first noticed according to the following schedule. INITIAL DOSE. Calculate the total volume of water to be treated. Using the volume, calculate the number of pounds of BUSEN 1059 needed to produce a concentration of 0.75 to 1 ppm (0.025 lb/bbl) BUSEN 1059 per each 1000 gallons of water in the system. The dosage may be a continuous treatment or applied once, twice or three times weekly as required to control the growth of existing organisms. SERIAL RECOMMENDED USE: When microbial control is evident add 1.25 - 7.5 ppm of BUSEN 1059 per each 1000 gallons of water in the system as a continuous treatment daily or every three days as required to maintain control.

**Epoxy Flooring Compound:**

For epoxy flooring compounds and BUSEN 1059 at use levels of 0.05 to 0.1% by weight, based on the total formulation of the compound to inhibit bacterial and fungal growth on the finished compound.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

For use as a preservative of industrially prepared water based suspensions (pigment slurries, adhesives, polymers, and starches), and as an antimicrobial in oilfield operations:

**For industrially prepared water-based suspensions (pigment slurries, adhesives, polymers, and starchers) use:**

- Tetrahydro-3,5-diethyl-2H-1,3,5-thiadiazine-2-thione 98.0%
- 3.0%
- 100.0%

**Containers:**

- Fiber drums with liners. Completely empty by sharing and topping drums bottom to lessen ringing particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

**Net contents are marked on the container.**

**EPA Est. No.**

1448-T81-1

**EPA Reg. No.**

1448-104

**Product Weight**

4.4 sl/wg 0.53 kg/l

**HMS / NPICA Ratings**

Health 3 Flammability 1 Reactivity 1

**Last Revision**

2/26/2002

Manufactured by

Buckman Laboratories, Inc.

1256 North McGavock Blvd., Memphis, Tennessee 38104, USA

(901) 278-6326 or 1-800-BUCKMAN

Under the Federal Insecticide, Fungicide, and Rodenticide Act, this product is registered only for use on or in raw agricultural commodities.