



**BUSAN 1059**  
BUSAN is a registered trademark.

<b>ACTIVE INGREDIENT(S)</b>	
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione	98.0%
<b>INERT INGREDIENT(S)</b>	2.0%
<b>TOTAL</b>	100.0%

**KEEP OUT OF REACH OF CHILDREN  
WARNING**

FIRST AID	
If in Eyes	- Hold eye open and rinse slowly and gently with water for 15-20 minutes. - Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. - Call a poison control center or doctor for further treatment advice.
If on Skin, Clothes	- Take off contaminated clothing. - Rinse skin immediately with plenty of water for 15-20 minutes. - Call a poison control center or doctor for treatment advice.
If Swallowed	- Call 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 the poison control center or doctor. - Do not give anything by mouth to an unconscious person.
If Inhaled	- Move person to fresh air. - If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth if possible. - Call a poison control center or doctor for further treatment advice.
HOT LINE NUMBER	
Have the product container or label with you when calling a Poison Control Center or doctor or going for treatment. You may also contact 901-278-0330 or 1-800-BUCKMAN for emergency medical treatment information.	
NOTE TO PHYSICIAN	
Probable mucosal damage may contraindicate gastric lavage.	

**Precautionary Statements**

**HAZARDS TO HUMANS AND DOMESTIC ANIMALS**

**WARNING:** Corrosive. Causes eye damage and severe skin irritation. Harmful or fatal if swallowed or absorbed through skin. Do not get in eyes or on clothing. Avoid contaminating food. Wear goggles or face shield and rubber gloves when handling. May cause skin sensitization.

**ENVIRONMENTAL HAZARDS:** This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination Systems (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 previously notifying 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.

**ACCEPTED**

JAN 11 2005

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 1448-104

**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), AS AN ANTIMICROBIAL IN OILFIELD OPERATIONS, RECIRCULATING COOLING WATER SYSTEMS, EPOXY FLOORING COMPOUNDS, AND WOOD AND WOOD PRODUCTS.**

**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 slurries and high viscosity suspensions, BUSAN 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 BUSAN 1059 at use levels of 0.01-0.11% 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/polyvinyl acetate based adhesives; starch based adhesives; dextrin based adhesives. For Water Soluble Packaging, this may be accomplished by adding from 1 to 3 pounds of BUSAN 1059 to each 10,000 pounds based on the weight of the total formulation. 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 tests.

**FOR OILFIELD OPERATIONS USE: OILFIELD DRILLING MUDS AND WORKOVER OR COMPLETION FLUIDS: FOR CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA:** Determine the total volume of the circulating system. Calculate the number of pounds of BUSAN 1059 needed to produce a concentration of 520 ppm (0.18 lb/bbl) BUSAN 1059 in the drilling mud circulating system. For example, 182 pounds of BUSAN 1059 per 1000 barrels of drilling fluid will produce the proper concentration. For best results, add BUSAN 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 BUSAN 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 prescribed.

**OILFIELD WATER TREATMENT AND WATER FLOODS: FOR CONTROL OF SLIME-FORMING AND/OR SPOILAGE BACTERIA:** Calculate the total volume of water to be treated. Using this volume, calculate the number of pounds of BUSAN 1059 needed to produce a concentration of approximately 625 ppm BUSAN 1059. For example, 5.22 pounds of BUSAN 1059 per each 1000 gallons of total volume will produce this dilution. For Water Soluble Packaging, for example, 1 pound of BUSAN 1059 per each 191 gallons of total volume will produce this solution. To maintain bacterial control, 88 ppm BUSAN 1059 added each week is recommended. This may be accomplished by adding 0.73 pounds of BUSAN 1059 to each 1000 gallons of total volume. For Water Soluble Packaging, this may be accomplished by adding 1 pound of BUSAN 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 initiation. Systems which are heavily contaminated should be cleaned first. Apply BUSAN 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 this volume, calculate the number of pounds of BUSAN 1059 needed to produce a concentration of 7.5 - 15 ppm of BUSAN 1059 per each 1000 gallons of water in the system. For Water Soluble Packaging, this may be accomplished by adding 1 pound of BUSAN 1059 per each 8,000 - 16,000 gallons of water in the system. This dosage may be a continuous treatment or applied once, twice or three times weekly or as required to control the growth of slime forming organisms. **SUBSEQUENT DOSAGE:** When microbial control is evident add 1.25 - 7.5 ppm of BUSAN 1059 per 1000 gallons of water in the system as a continuous treatment daily or every three days as required to maintain control. For Water Soluble Packaging, this may be accomplished by adding 1 pound of BUSAN 1059 per each 16,000 - 96,000 gallons of water in the system.

**EPOXY FLOORING COMPOUNDS:** For epoxy flooring compounds add BUSAN 1059 at use levels of 0.05 to 0.6%, by weight, based on the total formulation of the compound to inhibit bacterial and fungal growth on the finished compound.

**WOOD AND WOOD PRODUCTS:** BUSAN 1059 is recommended for the internal remedial treatment and protection of wood products such as utility poles, pilings, timbers, and other large solid or laminated wood products against fungal decay. BUSAN 1059 is designed to be placed inside the wood product to be treated. The total amount applied will be dependent on the size of the wood unit and the zone to be protected. BUSAN 1059 is applied in treatment holes drilled into the wood at a 45 degree angle downward or greater, which are then plugged. For wood in ground contact, the first hole should start at or slightly below ground-line and should be arranged in a spiral pattern covering the treatment zone with about 6 to 12 inches vertically between holes. Do not overfill the treatment holes to allow room for a plug.

The following example can be used as a guide for the application of this product to treat the groundline zone of a 40 inch circumference standing utility pole.

1. Drill three 7/8 inch diameter by 14 inch long holes at a steep downward angle in a spiral pattern starting at groundline as described above.
2. Apply 70 grams of BUSAN 1059 into each hole, using a calibrated applicator.
3. Add liquid accelerant if desired to treatment hole.
4. Plug the treatment hole with a tight fitting treated wooden dowel, removable plastic plug or other suitable cap.

An accelerant of a 1% solution of copper naphthenate in mineral spirits may be added to treatment holes after BUSAN 1059, and is designed to speed the decomposition and release of active fumigant inside the wood product. Accelerating the release of fumigant is especially desirable when active decay is present. Keep accelerants away from BUSAN 1059 except in treatment holes, which should be plugged immediately after they combine.

BUSAN 1059 is not to be used indoors or underneath indoor structures.

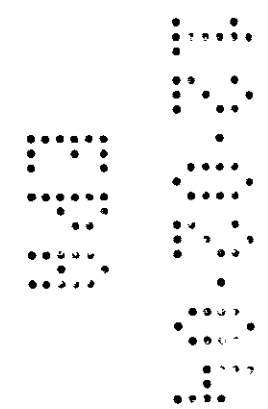
**Storage and Disposal**

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

**PESTICIDE STORAGE:** Protect from temperatures in excess of 140°F. Keep container closed when not in use. If contents are spilled or leaked due to container damage, collect and dispose of in accordance with local, state, and federal pesticide disposal regulations.

**PESTICIDE DISPOSAL:** Pesticide wastes are toxic. 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:** Fiber Drums with Liners- Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by state and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.



**Manufactured by**  
**Buckman Laboratories, Inc.**  
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Memphis, Tennessee 38108, USA  
**(901) 278-0330 or 1-800-BUCKMAN**

**EPA Est. No. 1448-TN-1**  
**EPA Reg. No. 1448-104**  
**Product Weight 4.4 lbs/gal 0.53 kg/l**  
Net contents are marked on the container.

**HMIS / NPCA Ratings**

Health	3	Flammability	1	Reactivity	1
<b>Last Revision</b>		<b>12/1/2004</b>			

1448-104

01/11/2005

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