M-5-1

ACTIVE INGREDIENT(S)	
2-(Thiocyanomethylthio)benzothiazole	2.5%
Methylene bis(thiocyanate)	2.5%
INERT INGREDIENTS	95.0%
(Contains Petroleum Distillates)	
TOTAL	100.0%

One gallon of product contains 0.215 lbs of each active ingredient.

KEEP OUT OF REACH OF CHILDREN
DANGER PELIGRO

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 the use of gastric lavage. This product may pose an aspiration pneumonia hazard. Contains petroleum distillate.	

Precautionary Statements

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive. Causes irreversible eye damage or skin burns. May be fatal if swallowed or absorbed through skin or inhaled. Do not get in eyes, on skin, or on clothing. Do not breathe spray mist. Prolonged or frequently repeated skin contact may cause allergic reaction in some individuals. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

Personal Protective Equipment (PPE)
Applicators and all other handlers must wear coveralls over long-sleeved shirt and long pants; socks and chemical resistant footwear; goggles or face shield; chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride or viton; and respirator with an organic vapor removing cartridge with a prefilter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C); or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G); or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any R, P, or HE prefilter. In addition to the PPE listed above, mixers, loaders, and cleaners of equipment must also wear chemical-resistant apron.

ENVIRONMENTAL HAZARDS: This pesticide is toxic to fish. For terrestrial uses, do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. 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 System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

PHYSICAL AND CHEMICAL HAZARDS: Do not expose to extreme temperatures.

Directions for Use

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.
NOTE TO USER: Do not apply this product in a way that will contact workers or other persons.

COOLING TOWERS: M-5-1 is used to protect cooling tower wood against soft or surface rot and internal or dry rot. It is applied by painting a dispersion containing 2.0 to 2.8% M-5-1 in water onto the clean wood surfaces. The amount applied should provide 2.4 to 3.2 lb. M-5-1 per 1000 sq. ft. of wood surface. Soft or surface rot can also be inhibited by periodic shock doses of M-5-1 to the recirculating cooling water at the tower basin or cold well. The dosage should provide 5.0 lb. of M-5-1 per 1000 gal. of water and the bleedoff should be stopped for 4 to 6 hours after treatment. The shock treatment should be repeated every four months.
For treatment of cooling tower systems greater than or equal to 4000 gallons: Do not apply by open pouring of M-5-1 to cooling towers systems. A metering pump delivery system is required for this use and application method.

COOLING WATER: M-5-1 is used to control algae, bacteria, and fungi in industrial recirculating cooling water systems. Before treatment is begun, the system should be cleaned thoroughly to remove old algal growth, microbiological slime, and other deposits. The system should then be drained, flushed, refilled with water, and treated with an initial dose of 2.4 to 14.8 fluid oz. M-5-1 per 1000 gal. water in the system. Subsequent additions of 0.8 to 4.8 fluid oz. per 1000 gal. should be made every 1 to 5 days, depending on amount of bleedoff and severity of microbiological fouling.
For treatment of cooling water systems greater than or equal to 4000 gallons: Do not apply by open pouring of M-5-1 to cooling water systems. A metering pump delivery system is required for this use and application method.

DRILLING FLUIDS: To inhibit bacterial and fungal degradation of the fluids or muds used in the drilling of wells, M-5-1 is incorporated in the drilling fluid at concentrations of 0.2 to 1.0% based on the total wet weight of the fluid.

PETROLEUM SECONDARY RECOVERY: M-5-1 is used to control sulfate-reducing bacteria, slime-forming bacteria and fungi in oil-field water, polymer, or micellar floods, water-disposal systems, and other oil-field water systems at dosage rates of 15.6 to 52.0 fluid oz. M-5-1 per 1000 gal. of water treated. Additions should be made continuously or intermittently by means of a metering pump at the free water knockouts, before or after injection pumps and injection well headers. Continuous Feed Method: When system is noticeably fouled, add 15.6 to 52.0 fluid oz. M-5-1 per 1000 gal. of water continuously, or as needed to maintain control. Intermittent or Slug Method: When system is noticeably fouled, or to maintain control, add 15.6 to 52.0 fluid oz. M-5-1 per 1000 gal. of water for 4 to 8 hours per day and 1 to 4 times per week, or as needed to maintain control.

CRUDE AND REFINED OILS: M-5-1 is an oil-soluble preservative for the control of bacteria and fungi that cause the degradation of crude oil and refined oils during storage. Crude and refined oils include, but are not limited to, olefinic, aromatic, paraffinic, and naphthenic oils. It should be added to the oil as it is being transferred from the shipping container to the storage tank at the rate of 2.4 to 24.0 fluid oz. M-5-1 per 1000 gal. of oil. Addition should be made batchwise where mixing occurs or continuously to the suction side of the transfer pump.

FUEL: M-5-1 can be used to eliminate and/or prevent the growth of bacteria and fungi in distillate and residual fuels including Gasoline, Diesel #1, Diesel #2, and Bunker C. M-5-1 is intended for use in applications where residual and distillate fuels are used such as; bulk storage tanks, locomotive fuel tanks, diesel trucks, diesel boats and ships, farm equipment, construction equipment, and diesel generators. M-5-1 should be addded to the fuel at a rate of 1.25 - 2.5 fluid ounce per 100 gallons. M-5-1 should be fed by injecting the product into the fill line as the fuel is being added or added batchwise while the fuel is being added to ensure adequate mixing. For contaminated systems M-5-1 should be added at a shock dose of 2.5 fluid ounces per 100 gallons. (see table below) For clean systems the maintenance dose is 1.25 to 2.5 fluid ounces per 100 gallons (see table).

Gallons of fuel	Shock Treatment	Maintenance treatment
20	0.5 fluid ounces	0.25 fluid ounces
40	1.0 fluid ounces	0.5 fluid ounces
60	1.5 fluid ounces	0.75 fluid ounces
100	2.5 fluid ounces	1.25 fluid ounces

M-5-1 is NOT for use in Aviation Fuels.

ACCEPTED
MAR 18 2004
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 1448-171

Storage and Disposal

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

PESTICIDE STORAGE: Do not expose to extreme temperatures. Do not stack more than five drums high. Drums should be opened in well-ventilated areas. Leaking or damaged drums should be placed in overpack drums for disposal. Spills should be absorbed in sawdust or sand and disposed of in a sanitary landfill. Keep container closed when not in use.

PESTICIDE DISPOSAL: Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Pesticide wastes are acutely hazardous. Wastes resulting from the use of the product, excess pesticide, spray mixture, or rinsate must be collected and disposed of at an approved disposal facility. 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 your EPA Regional Office for guidance.

CONTAINER DISPOSAL: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Manufactured by
Buckman Laboratories, Inc.
1256 North McLean Blvd.
Memphis, Tennessee 38108, USA
(901) 278-0330 or 1-800-BUCKMAN

EPA Est. No.	1448-TN-1
EPA Reg. No.	1448-171
Product Weight	8.6 lbs./gal. 1.03 kg.L

Net contents are marked on the container.

HMIS / NPCA Ratings

Health 3 Flammability 2 Reactivity 1

Last Revision 1/20/2004

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03/18/2004
1/1