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Systems Integration Group, Inc.

# M-5-2

**KEEP OUT OF REACH OF CHILDREN  
DANGER**

## PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER:** Corrosive, causes irreversible eye damage and causes skin damage. Harmful or fatal if swallowed or absorbed through the skin. This product is a potential skin sensitizer. Workmen handling this product or treated material should wear impervious gloves, goggles or face shield, and protective clothing. All protective clothing, work shoes or boots, and equipment must be left at the work site at the end of the day. Eating, drinking, or smoking during use of this product is prohibited.

**STATEMENT OF PRACTICAL TREATMENT (FIRST AID):** In case of skin contact, wash promptly and thoroughly with soap and water. Get medical attention. If product gets in the eyes, hold eyelids open and flush with a steady, gentle stream of water for 15 to 30 minutes. Get medical attention immediately. If product is swallowed, call a physician or Poison Control Center. Do not induce vomiting. First, rinse mouth with large amounts of water or milk. Then slowly give one to two glasses of water or milk. Avoid alcohol. Do not give anything by mouth to an unconscious person. Take individual to the nearest medical facility. If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**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.

## STORAGE AND DISPOSAL

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

**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:** Pesticide wastes are acutely hazardous. 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 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.

**ACCEPTED**

MAY 05 1999

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 1448-172

**ACTIVE INGREDIENTS:**  
Methylene bis(thiocyanate) ..... 2.5 %  
2-(Thiocyanomethylthio)benzothiazole ..... 2.5 %  
**INERT INGREDIENTS:** ..... 95.0 %

## DIRECTIONS FOR USE

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

**COOLING TOWERS:** M-5-2 is used to protect cooling tower wood against soft or surface rot and internal or dry rot. It is applied by painting dispersion containing 2.0 to 2.8% M-5-2 in water onto the clean wood surfaces. The amount applied should provide 2.4 to 3.2 lb. M-5-2 per 1000 sq. ft. of wood surface. Soft or surface rot can also be inhibited by periodic shock doses of M-5-2 to the recirculating cooling water at the tower basin or cold well. The dosage should provide 5.0 lb. of M-5-2 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. **COOLING WATER:** M-5-2 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 fl oz M-5-2 per 1000 gal water in the system. Subsequent additions of 0.8 to 4.8 fl oz per 1000 gal should be made every 1 to 5 days, depending on amount of bleedoff and severity of microbiological fouling. **DRILLING FLUIDS:** To inhibit bacterial and fungal degradation of the fluids or muds used in the drilling of wells, M-5-2 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-5-2 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 fl oz M-5-2 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 fl oz M-5-2 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 fl oz M-5-2 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-5-2 is an oil-soluble preservative for the control of bacteria and 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 fl oz M-5-2 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-5-2 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-5-2 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-5-2 should be added to the fuel at a rate of 1.25 to 2.5 fl oz per 100 gal. M-5-2 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-5-2 should be added at a shock dose of 2.5 ounces per 100 gal (see table below). For clean systems, the maintenance dose is 1.25 to 2.5 fl oz per 100 gal (see table below).

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-5-2 is NOT for use in Aviation Fuels.

**REVERSE OSMOSIS SYSTEMS:** M-5-2 may be used to control microbiological fouling in reverse osmosis systems used for process, wastewater, and other non-potable applications. M-5-2 should be fed to the membrane feedwater at a rate of 1 to 20 ppm (0.12 to 2.4 fl oz/1000 gal). The product should be added continuously for a time period of 1 to 3 hours, 3 to 7 days each week depending on the severity of the problem. For off line cleaning, M-5-2 should be added to provide a level of 20 to 200 ppm (2.4 to 24 fl oz/1000 gal) in the soak solution.

**HMIS/NPCA RATING**  
Health 3 Flammability 2 Reactivity 1

Product Weight: 8.6 lbs./gal. 1.03 kg/l  
**NET CONTENTS MARKED ON CONTAINER**

EPA Reg. No. 1448-172

Manufactured By EPA Est. No. 1448-TN-1  
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