31910-11 9/28/2000

## PRECAUTIONARY STATEMENTS Hazards to Humans and Domestic Animals WARNING

Causes eye and skin irritation. Do not get in eyes, on skin or on clothing. All industrial workers applying this product must wear coveralls over a long-sleeved shirt and long pants, shoes, socks, and chemical-resistant gloves. During dilution, a chemical-resistant apron and goggles or face shield must also be worn. Harmful if swallowed. Avoid contamination of food and feedstuffs.

#### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Do not apply (or use) in estuarine oil fields where drilling fluids (muds) are discharged in the surface water. Do not contaminate water by cleaning of equipment or disposal of wastes. 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

AQUATREAT DNM-9 is a highly effective bactericide and fungicide for use in controlling the growth of bacteria and fungi in industrial recirculating water cooling towers, air washers, evaporative condensers, pulp and paper mills, drilling fluids, secondary and tertiary petroleum recovery, and cane and beet sugar mills.

AQUATREAT DNM-9 in addition to being a bactericide and fungicide, is a highly effective algaecide for use in controlling the growth of algae as well as bacteria and fungi found in industrial recirculating water cooling towers, evaporative condensers, and air washers.

#### STORAGE AND DISPOSAL

#### 1. PROHIBITIONS

Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.

#### 2. 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.

#### 3. CONTAINER DISPOSAL

- (a) Reseal container and offer for reconditioning, or
- (b) Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill or by other approved state and local procedures.

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

#### 4. GENERAL

Consult federal, state or local disposal authorities for approved alternative procedures.

## **AQUATREAT® DNM-9**

**ACTIVE INGREDIENTS** 

Sodium Dimethyldithiocarbamate 4.5% Nabam (Discdium Ethylene Bis-dithiocarbamate) 4.5%
INERT INGREDIENTS 91.0%
TOTAL

KEEP OUT OF REACH OF CHILDREN WARNING FIRST AID					
	Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.				
	Call a poison control center or doctor for treatment advice.				
IF ON SKIN OR	Take off contaminated clothing.				
CLOTHING	Rinse skin immediately with plenty of water for 15 20 minutes.				
	<ul> <li>Call a poison control center or doctor for treatment advice.</li> </ul>				
IF SWALLOWED	Call a poison control center or doctor immediately for treatment advice.				
	<ul> <li>Have person sip a glass of water if able to swallow.</li> </ul>				
	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.				
	<ul> <li>If person is not breathing, call 911 or an ambulance</li> </ul>				
	then give artificial respiration, preferably by mouth				
	to-mouth, if possible.				
	Call a poison control center or doctor for further treatment advice.				

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also call 1-888-456-6218 day or night for emergency medical treatment information

See Side Panel For Additional Precautionary Statements.



Manufactured by:

#### **ALCO CHEMICAL DIVISION**

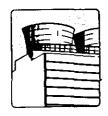
National Starch and Chemical Company 909 Mueller Dr. • P.O. Box 5401 • Chattanooga, TN 37406 423-629-1405 FAX 423-698-8723

E.P.A. Establishment No. 31910-TN-1 E.P.A. Registration No. 31910-11

Net Contents: Liquid

See Markings on Top of Drum for Net Weight

#### Cooling Towers and Air Washers



#### **DIRECTIONS FOR USE**

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

This product must not be used on any food or field crop or to formulate any product for use on any food or field crop.

# INDUSTRIAL RECIRCULATING WATER COOLING TOWER AND EVAPORATIVE CONDENSERS

Dosages for industrial recirculating water cooling towers or evaporative condensers will depend on the condition of the system prior to treatment initiation. Systems which are heavily contaminated should be cleaned first. Apply AQUATREAT DNM-9 to the cleaned system or when growth is first noticed, according to the following schedule:

Initial Dose: Apply 43.53 ounces of product per each 1000 gallons of water in the system (400 ppm). This dose may be repeated once, twice or three times weekly or as required to control the growth of slime-forming organisms.

Subsequent Dose: When microbial control is evident add 7.27 to 14.33 fluid ounces of AQUATREAT DNM-9 per 1000 gallons of water (66.7-133.3 ppm) in the system every three days or as needed.

#### AIR WASHERS

In treating air washer systems preclean by introducing a suitable detergent solution into the system and allow air washer to run with fan off for two hours. Flush. Check all nozzles and manually clean those that are plugged. Add product as specified under dosages for Cooling Towers.

#### Feeding

AQUATREAT DNM-9 may be fed directly from the drum or diluted with water and fed by any suitable feed system. AQUATREAT DNM-9 should be dosed directly into the sump or basin or any other location where good distribution can be assured.

#### **DRILLING FLUIDS**

AQUATREAT DNM-9 is a highly effective microbiocide for use in controlling the growth of fungi and bacteria found in water based drilling muds\_It is especially useful in muds containing starches, Xanthanate gums, and wood sugars. The uncontrolled growth of these fungi and bacteria can cause increased corrosion, undesirable odors, and degradation of the drilling mud, especially fluid loss properties.

#### **Drilling Fluids**



## Secondary and Tertiary Oil Recovery



**AQUATREAT DNM-9** is used at the rate 3.7 to 18.6 gallons per 100 bbl. of mud. (0.067% to 0.33%), it can be used directly from the shipping container or pre-diluted with water. It can be put in through the mud hopper or added to the pump suction.

## SECONDARY AND TERTIARY PETROLEUM RECOVERY

**AQUATREAT DNM-9** is a highly effective microbiocide for use in controlling the growth of fungi and bacteria found in secondary and tertiary petroleum recovery waterflood systems.

AQUATREAT DNM-9 can be injected directly from the shipping container. It should be thoroughly mixed into the produced water, fresh or salt water or commingled water or the secondary or tertiary oil recovery waterflood systems for effective microorganism control. It may also be diluted with water for injection.

AQUATREAT DNM-9 is used at the rate of 3.3 pints per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 3.7 to 6.2 gallons per 100 bbl. of water for heterotropic bacteria including Pseudomonas. It is also effective against many fungi such as Aspergillus, Penicillium and Trichoderma at the 3.3 pints per 100 bbl. of water.

#### PAPER MILLS

Dosage will vary from 0.33 to 6.67 pounds (0.13 to 2.70 quarts) of AQUATREAT DNM-9 per ton of finished paper depending on the type of stock, complexity of the system, quality of raw water, and type and degree of contamination.

#### Feeding

**AQUATREAT DNM-9** may be drip fed continuously from the drum or fed by suitable chemical pumps such as adjustable proportioning types; variable speed, positive displacement types; or by the reciprocating type. This product should be fed as early as possible in the system at such points including the hydropulper, machine chest or broke system.

**AQUATREAT DNM-9** can be used to control slime on machines which can make paper and paperboard for use in food packaging.

#### **BEET SUGAR MILLS**

AQUATREAT DNM-9 should be fed directly into the raw juice during sugar extraction of beets to keep equipment free of bacterial slime deposits. It is to be used at the rate of 33.3-66.7 ppm of raw beets sliced, and fed continuously into the pulp press water tank with a metering pump. The maximum rate to be fed is 66.7 ppm. Refer to composite table 1 for the proper dosage in milliliters and ounces of AQUATREAT DNM-9 to be used per minute.

#### Pulp & Paper



#### **CANE SUGAR MILLS**

AQUATREAT DNM-9 is a liquid which should be fed directly into the cane juice so that the treated juice circulates to all parts of the mill tandem. The point or points of addition will depend on mill design. Frequently the dosage will be split between the crusher juice and juice from the last mill. The best addition point is to the juice which is circulated back to the crusher from the first mill. Do not add this product to the maceration water.

AQUATREAT DNM-9 should be fed continuously at the rate of 33.3-66.7 parts of product per million parts of cane ground per day. 33.3 ppm. of product is the standard dosage. This may be raised up to a maximum of 66.7 ppm, if necessary. Conditions warranting, some increase would be warranted when grinding cane damaged through freezing, poor weather or delays between cutting and grinding. See feeding directions which follow.

Proper feed of AQUATREAT DNM-9 is best obtained through the use of a chemical feed pump such as the adjustable proportioning type; the variable speed, positive displacement type; or the reciprocating type. The required dosage will depend on the average daily rate of cane ground. Refer to composite table 1 for the proper dosage in milliliters and ounces of AQUATREAT DNM-9 to be used per minute.

Do not exceed feed rate of 15 gallons (130.7 pounds) of product per 1000 short tons of cane ground per twenty-four hours.

The use of **AQUATREAT DNM-9** does not replace good housekeeping. This should include regular cleaning at least once per shift. Regular hosing of mills bagacillo conveyors, and screens with hot water and steam is essential for maintaining efficient control of microbiological slime and surcrose losses.

#### **COMPOSITE TABLE 1**

RATE OF FEED OF AQUATREAT DNM-9			
33.3 ppm		66.7 ppm	
ml/min	oz/min	ml/min	oz/min
18.3	0.620	36.7	1.240
36.7	1.240	73.3	2.480
55.0	1.860	109.9	3.716
73.3	2.480	146.7	4.956
91.7	3.100	183.3	6.196
110.0	3.716	220.0	7.436
128.3	4.336	256.6	8.676
146.7	4.956	293.3	9.912
165.0	5.576	330.0	11.152
183.3	6.196	366.6	12.392
	33.3 ml/min 18.3 36.7 55.0 73.3 91.7 110.0 128.3 146.7 165.0	33.3 ppm ml/min oz/min 18.3 0.620 36.7 1.240 55.0 1.860 73.3 2.480 91.7 3.100 110.0 3.716 128.3 4.336 146.7 4.956 165.0 5.576	33.3 ppm 66.7 ml/min 18.3 0.620 36.7 36.7 1.240 73.3 55.0 1.860 109.9 73.3 2.480 146.7 91.7 3.100 183.3 110.0 3.716 220.0 128.3 4.336 256.6 146.7 4.956 293.3 165.0 5.576 330.0

#### Sugar



For Chemical Emergency
Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC — Day or Night
1-800-424-9300

### ACCEPTED

SEP 2 8 2000

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 3/9/0-//

Seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and or handling of this material, when such use and or handling is contrary to label instructions.