

**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 contact with food and feedstuffs.

**ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish. Do not apply near water. Do not apply to surface water. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not allow contaminated effluent into lakes, streams, rivers, or other bodies of water. In accordance with an approved permit from the State or Regional Office of the Environmental Protection Agency.

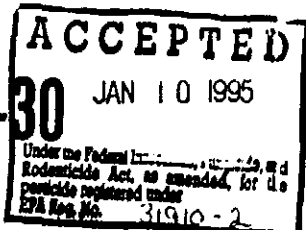
**AQUATREAT DNM-30** is a highly effective microbicide for use in controlling the growth of fungi and bacteria found in water based drilling fluids. Secondary and tertiary petroleum recovery waterflood systems. Workover and completion fluids. Flue gas desulfurization thickener, hydrate carbon fluids storage, beet sugar mills, and other water systems.

**AQUATREAT DNM-30** is used for being a bactericide and fungicide. It is a highly effective algicide for use in controlling the growth of algae in water based drilling fluids. Secondary and tertiary petroleum recovery waterflood systems. Workover and completion fluids.

**STORAGE AND DISPOSAL**

- PROHIBITIONS**  
Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited.
- PESTICIDE DISPOSAL**  
Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, 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**
  - Reseal container and offer for reconditioning, or
  - 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.
- GENERAL**  
Consult Federal, State, or local disposal authorities for approved alternatives.

**AQUATREAT DNM-30**



**ACTIVE INGREDIENTS**

Sodium Dimethyldithiocarbamate	
Nabam (Disodium Ethylene Bis-dithiocarbamate)	15%
<b>INERT INGREDIENTS</b>	<b>70%</b>
<b>TOTAL</b>	<b>100%</b>

**KEEP OUT OF REACH OF CHILDREN**

**WARNING**

**STATEMENT OF PRACTICAL TREATMENT**

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. For eyes, call a physician. Remove and wash contaminated clothing before reuse.

If swallowed, drink promptly a large quantity of egg whites, gelatin solution or if these are not available, drink large quantities of water. Call a physician immediately.

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 37408  
615-629-1405  
Fax 615-698-8723 • TLX 755002

E.P.A. Establishment No. 31910-TN-1  
E.P.A. Registration No. 31910-2  
Net Contents: Liquid  
31.25 Gallons (1.17) per 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 feed crop or to formulate any product for use on any food or feed crop.

SEE TECHNICAL DATA SHEET(S) FOR ADDITIONAL USE PATTERN(S).

**INDUSTRIAL RECIRCULATING WATER COOLING TOWER AND EVAPORATIVE CONDENSERS**

Dosage for industrial recirculating water cooling tower 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-30** to the cleaned system or when growth is first noticed, according to the following schedule:  
**INITIAL DOSE:** Apply 13.06-43.60 ounces of product per each 1000 gallons of water in the system (120-400 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 2.18-4.36 fluid ounces of **AQUATREAT DNM-30** per 1000 gallons of water (20-40 ppm) in the system every three days or as needed.

**AIR WASHERS**

In treating air washer systems pre-clean by introducing a suitable detergent solution into the system and allow air washers to run with fan off for two hours. Check all nozzles and manually clean those that are plugged.

Feeding: **AQUATREAT DNM-30** may be fed directly from the drum or diluted with water and fed by any suitable feed system. **AQUATREAT DNM-30** should be dosed directly into the sump or basin or any other location where good distribution can be assured.

**INITIAL DOSE:** Apply 13.06-21.80 ounces of product per each 1000 gallons of water in the system (120-200 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 2.18-4.36 fluid ounces of **AQUATREAT DNM-30** per 1000 gallons of water (20-40 ppm) in the system every three days or as needed.

**Drilling Fluids**



**DRILLING FLUIDS**

**AQUATREAT DNM-30** is a highly effective microbicide for use in controlling 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 deterioration of the drilling fluid, especially in low loss proportion.

**AQUATREAT DNM-30** is used at the rate of 1 to 5 gallons per 100 bbl. of mud (0.02% to 0.1%). 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-30** is a highly effective microbicide for use in controlling the growth of fungi and bacteria found in secondary and tertiary petroleum recovery waterflood systems.

**AQUATREAT DNM-30** 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 micro-organism control. It may also be diluted with water for injection.

**AQUATREAT DNM-30** is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of *Bacillus Cereus* and *Desulfovibrio desulfuricans* and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including *Pseudomonas*. It is also effective against many fungi such as *Aspergillus*, *Penicillium* and *Trichoderma* at the 1 pint per 100 bbl. of water.

**FRACTURING FLUIDS**

**AQUATREAT DNM-30** is a highly effective microbicide for controlling the growth of bacteria in fracturing fluids. The application rates are 0.81 to 4.3 lbs. per 1000 gallons of fracturing fluids. **AQUATREAT DNM-30** may be added and premixed prior to the fracturing operation or may be added directly from the drum to the blender during the operation.

**WORKOVER & COMPLETION FLUIDS**

**AQUATREAT DNM-30** is a highly effective microbicide for use in controlling the growth of fungi and bacteria found in water based workover and completion fluids. **AQUATREAT DNM-30** is used at the rate of 1-4 quarts per 1000 gallons (0.025% to 0.100%) of workover or completion fluids.

**Secondary and Tertiary Oil Recovery**



AQUATREAT DNM-30 is a highly effective microbicide for use in controlling the growth of fungi and bacteria found in secondary and tertiary petroleum recovery waterflood systems.

AQUATREAT DNM-30 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 micro-organism control.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

AQUATREAT DNM-30 is used at the rate of 1 pint per 100 bbl. of water for growth inhibition of Bacillus Cereus and Desulfovibrio desulfuricans and 1.1 to 1.8 gallons per 100 bbl. of water for heterotrophic bacteria including Pseudomonas.

**BEST AVAILABLE COPY**

172

31910-2

PM 31

... Tertiary  
... vory



Pulp & Paper



Sugar



### FLUE GAS DESULFURIZATION (FGD) THICKENERS

(NOT APPLICABLE IN CALIFORNIA)

AQUATREAT DNM-30 is effective in controlling anaerobic bacteria (SRB's) in flue gas desulfurization (FGD) thickeners.

AQUATREAT DNM-30 is metered directly to the thickener center wall. It is fed at the rate of 50 to 500 ppm of product on a frequency of at least once per week or as required.

### HYDROCARBON FLUIDS (NOT APPLICABLE IN CALIFORNIA)

AQUATREAT DNM-30 is a highly effective fungicide and bactericide for use in fuel oil (No. 2 oil, intermediate fuel oil and No. 6 oil), lubricating oil and hydraulic fluids in marine environments.

AQUATREAT DNM-30 is applied initially at a level of 2.3 pints per 1000 gallons of contaminated liquid (300 ppm by weight). Subsequent dosages may be decreased once the contaminants have been brought under control.

### PAPER MILLS

Dosage will vary from 0.1 to 2.0 pounds (0.04 to 0.81 quarts) of AQUATREAT DNM-30 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-30 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-30 can be used to control slime on machines which can make paper and paperboard for use in food packaging.

### BEEF SUGAR MILLS

AQUATREAT DNM-30 should be fed directly into the pulp press water during sugar extraction of beets to keep equipment free of bacterial slime deposits. It is to be used at the rate of 10-20 ppm of raw beets sliced, and fed continuously with a metering pump. A portion of the AQUATREAT DNM-30 may be fed into other streams entering the diffuser each at a minimum rate of 4 ppm. The maximum total rate of all streams to be fed is 20 ppm. Refer to Composite Table 1 for the proper dosage in milliliters and ounces of AQUATREAT DNM-30 to be used per minute.

### CANE SUGAR MILLS

AQUATREAT DNM-30 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-30 should be fed continuously at the rate of 10-20 parts of product per million parts of cane ground per day. 10 ppm of product is the standard dosage. This may be raised up to a maximum of 20 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-30 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-30 to be used per minute.

Do not exceed feed rate of 4 gallons (39.2 pounds) of product per 1000 short tons of cane ground per twenty-four hours.

The use of AQUATREAT DNM-30 does not replace good housekeeping. This should include regular cleaning at least once per shift. Regular hosing with hot water and steam of mills, bagacillo conveyors, and screens is essential for maintaining efficient control of microbiological slime and sucrose losses.

### COMPOSITE TABLE I

SHORT TONS OF CANE GROUND OR RAW BEETS SLICED PER DAY	Rate of Feed of AQUATREAT DNM-30 10 ppm		20 ppm	
	ml/min	oz/min	ml/min	oz/min
1,000	5.5	0.186	11	0.372
2,000	11.0	0.372	22	0.744
3,000	16.5	0.558	33	1.115
4,000	22.0	0.744	44	1.487
5,000	27.5	0.930	55	1.859
6,000	33.0	1.115	66	2.231
7,000	38.5	1.301	77	2.603
8,000	44.0	1.487	88	2.974
9,000	49.5	1.673	99	3.347
10,000	55.0	1.859	110	3.718

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

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.

E10/92

BEST AVAILABLE COPY

2 of 2