

# AMERSPERSE® 280

## SEAWATER COOLING TREATMENT

### FOR MARINE USE ONLY

This product is a highly effective antifoulant and seawater biocide designed to control the growth of microorganisms (bacteria and fungi) and barnacle larvae on shipboard seawater heat exchangers.

#### GENERAL CLASSIFICATION

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. See side panel for Directions For Use. Refer to AMERSPERSE® seawater cooling treatment Product Data sheet for additional information.

#### STORAGE AND DISPOSAL

**STORAGE:** Do not contaminate water, food or feed by storage or disposal. Store in a cool dry place. Avoid extreme heat or freezing. Keep container closed. Do not store in confined areas where vapors can concentrate.

**DISPOSAL:** Wastes (pesticide or rinsate) resulting from the use of this product that cannot be used or chemically reprocessed may be disposed of on site or at an approved waste disposal facility.

Triple rinse (or equivalent) all containers then offer for recycling or reconditioning, or puncture and dispose at a sanitary landfill, or by other procedures approved by state and local authorities. Plastic containers may also be disposed of by incineration or if allowed by state and local authorities, by burning. If burned, stay out of smoke.



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Manufactured in the United States  
ES-216-R 7/84

**ACTIVE INGREDIENTS**  
Sodium dimethyldithiocarbamate . . . . . 15%  
Disodium ethylene bisdithiocarbamate . . . . . 15%  
**INERT INGREDIENTS** . . . . . 70%

### KEEP OUT OF REACH OF CHILDREN

### WARNING

#### STATEMENT OF PRACTICAL TREATMENT

**IF SWALLOWED,** drink promptly a large quantity of milk, egg whites, gelatin solution or, if these are not available, drink large quantities of water. Get medical assistance.

**IF ON SKIN,** wash thoroughly with soap and water. Remove and wash contaminated clothing before reuse.

**IF IN EYES,** flush with plenty of water for at least 15 minutes. Get medical assistance.

SEE NEXT PANEL FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA Reg. No. 1757-48  
EPA Est. No. 1757-NJ-1  
1757-NJ-2  
1757-TX-1

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

### WARNING

Causes skin and eye irritation. Do not get in eyes, on skin, or on clothing. Harmful if swallowed or absorbed through skin. Avoid contamination of food.

Wear goggles, rubber gloves and protective clothing (long sleeve shirt, long pants and boots) when handling. Wash thoroughly after handling. See Statement of Practical Treatment.

#### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge treated effluent into lakes, streams, ponds or public waters unless in accordance with an NPDES permit. For guidance contact your Regional Office of the EPA.

#### IMPORTANT NOTICE:

Seller warrants that the product conforms to its chemical description and is reasonably fit for the purposes stated on the label under normal conditions of use. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED. THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN OTHER RESPECTS THAN AS EXPRESSLY SET FORTH HEREIN, ARE EXPRESSLY EXCLUDED AND DISCLAIMED.

NET CONTENTS — As marked on drum

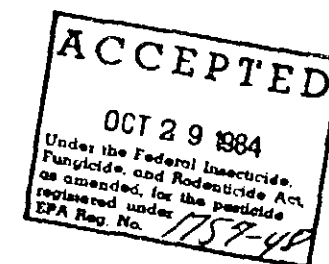
### DIRECTIONS FOR USE

To achieve best control of fouling, AMERSPERSE® 280 seawater cooling treatment should be applied to a clean system. If fouling is present, it is recommended that the system be thoroughly cleaned prior to its use.

For best results, treat the system with 10 ppm of AMERSPERSE® 280 for 100 minutes every 3-4 days. To treat at 10 ppm, feed at the rate of 1.5 liters for every 100 ton/hr. of system flow rate. The frequency of dosing may be less depending on the degree of fouling. Consult your local Drew Marine Representative.

AMERSPERSE® 280 is completely soluble in seawater and can be conveniently fed directly from the drum or from a dosing tank. The best point of feed is as early as possible in the system, preferably before any strainer or heat transfer surfaces. The most common point is to dose the sea chest.

AMERSPERSE® 280 should not be fed to a system while the seawater is being drawn as make-up for an evaporator or water maker. Either isolate the evaporator or shut it down while the AMERSPERSE® 280 is being dosed and for at least 30 minutes afterwards.



## AMERSPERSE® 280

seawater cooling treatment

ACCEPTED

OCT 29 1984

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act,  
as amended, for the pesticide  
registered under  
EPA Reg. No. 1757-48

### DESCRIPTION

AMERSPERSE® 280 seawater cooling treatment is a highly effective biocide of the organosulfur type which is used to keep the seawater cooling system free of marine fouling. When the system is free of fouling of the microbiological (bacteria and fungi) or the macrobiological (barnacles and mussels) types, the ability to transfer heat is at the maximum. The use of AMERSPERSE® 280 will reduce maintenance and operating costs by keeping the system clean and at design conditions.

### APPLICATION AND USE

#### • Pre-cleaning

It is recommended that the cooling water system to be treated be cleaned prior to beginning an AMERSPERSE® 280 fouling prevention program.

The reason for cleaning is that if the cooling system is already fouled, AMERSPERSE® 280 will kill the marine growths present. The shells from these growths may then become dislodged and block the heat transfer cooling passages.

#### • Dosage

Begin the AMERSPERSE® 280 seawater cooling treatment program by treating the system with 10 ppm of AMERSPERSE® 280 for 100 minutes every three (3) days in coastal waters and at least once mid-voyage on deep sea crossings, but at least every seven (7) days. To obtain the 10 ppm level, feed 1.5 liters of AMERSPERSE® 280 over the 100 minutes for every 100 tons of water flow rate per hour.

#### • Application

AMERSPERSE® 280 is a liquid which is completely soluble in seawater. An eductor feed system - part number 084012 - is recommended because of the ease of application and lack of crew handling.

will contact all parts of the seawater cooling system.

AMERSPERSE® 280 should not be fed to a system while seawater is being drawn as make-up for an evaporator or water maker. Either bypass the evaporator or shut it down while the AMERSPERSE® 280 is being dosed. The equipment should not be returned to service for at least thirty (30) minutes afterwards which will assure complete removal of all traces of treatment from the system.

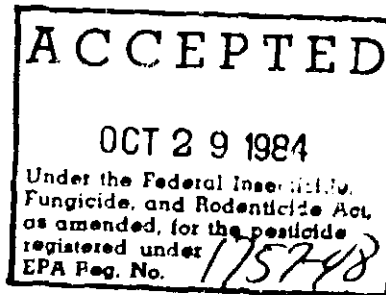
## PRODUCT FEATURES AND BENEFITS

### FEATURES

- Highly effective antifoulant
- Utilizes simple low-cost equipment
- Concentrated liquid

### BENEFITS

- Controls marine biological fouling
- Minimizes biological corrosion
- Maintains design heat transfer efficiency
- Reduces maintenance and down-time costs
- Does not require continuous application and monitoring
- No major capital investment in equipment
- No maintenance of sophisticated equipment
- Cost-effective - easily applied



## TYPICAL PHYSICAL PROPERTIES

Composition: A blend of sodium dimethyldithiocarbamate and disodium ethylene bisdithiocarbamate plus inert ingredients.

Active Ingredients: 30.0 ± 0.5%

Appearance: A clear yellow-green liquid

Odor: Mild hydrogen sulfide odor

Flash Point: None (PMCC)

pH: 10.5 - 12.5 (when drummed)

Specific Gravity: 1.13 - 1.17 (at 25°C)

Water Solubility: Complete in all proportions

## STORAGE AND PACKAGING

Avoid freezing or excessive heat.

Available in 25 liter pails and 120 liter drums.

EPA Reg. No. 1757-48

