

BETZ® ENERGY CHEMICALS, INC.

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND
DOMESTIC ANIMALS

DANGER

CORROSIVE. CAUSES SKIN AND EYE BURNS. HARMFUL OR FATAL IF SWALLOWED. DO NOT TAKE INTERNALLY. DO NOT GET INTO EYES, ON SKIN OR ON CLOTHING. DO NOT INHALE VAPOR OR MIST. USE WITH ADEQUATE VENTILATION. WEAR RUBBER GLOVES, GOGGLES AND FACE SHIELD WHEN HANDLING. IMMEDIATELY REMOVE AND WASH CONTAMINATED CLOTHING BEFORE REUSE. WASH THOROUGHLY AFTER HANDLING.

ENVIRONMENTAL HAZARDS

THIS PESTICIDE IS TOXIC TO FISH AND WILDLIFE. DO NOT APPLY IN MARINE AND/OR ESTUARINE OIL FIELDS. DO NOT DISCHARGE EFFLUENT CONTAINING THIS ACTIVE INGREDIENT INTO LAKES, STREAMS, PONDS, ESTUARIES, OCEANS, OR PUBLIC WATERS UNLESS THIS PESTICIDE IS SPECIFICALLY IDENTIFIED AND ADDRESSED IN AN NPDES PERMIT. DO NOT DISCHARGE EFFLUENT CONTAINING THIS PESTICIDE TO SEWER SYSTEMS WITHOUT PREVIOUSLY NOTIFYING THE SEWAGE TREATMENT PLANT AUTHORITY. FOR GUIDANCE CONTACT YOUR STATE WATER BOARD OR REGIONAL OFFICE OF THE EPA. APPLY THIS PESTICIDE ONLY AS SPECIFIED ON THIS LABEL.

PHYSICAL AND CHEMICAL HAZARDS

CHEMICAL HAZARD: STRONG OXIDIZING AGENT. CONTACT WITH COMBUSTIBLE MATERIAL MAY CAUSE FIRE. KEEP AWAY FROM FIRE, HEAT AND OPEN FLAME. DO NOT PERMIT TO DRY. MAY IGNITE IF DRIED. CLOTHING CONTAMINATED WITH CHLORITE OR ITS SOLUTION ARE DANGEROUSLY FLAMMABLE. IF SPILLED, FLUSH SPILLAGE TO DRAIN WITH LARGE QUANTITIES OF WATER.

NET WT.:
LOT NO.

LBS.

FOR INDUSTRIAL USE. Technical advice regarding specific site problems is available from BETZ. 886EPA 8003

ENCHEM DX-886

CHLORINE DIOXIDE PRECURSOR
MICROBIAL CONTROL AGENT

Active Ingredient:

Sodium Chlorite.....25.0%

Inert Ingredients.....75.0%

Total.....100.0%

CONTENTS: LIQUID

POUNDS PER GALLON: 10.3 (60F)

EPA REG. NO.: 48525-16

EPA EST. NO.

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

STORAGE AND DISPOSAL

STORAGE: Keep container tightly closed. Protect from freezing. Store in a dry place. Do not store at elevated temperatures.

PESTICIDE DISPOSAL: Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous and/or 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.

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

FIBER DRUMS WITH LINERS: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner and drum in a sanitary landfill or incinerate if allowed by state and local authorities. Do not reuse empty drum or liner.

OIL FIELD WATER SYSTEMS

This product may be used, as is, as a bactericide to prevent the formation of bacterial slimes and sulfide producing bacteria in oil field systems. This product may also be used as a precursor to generate chlorine dioxide for use as a bactericide for oil field systems. It is particularly effective in killing sulfate-reducing and slime-forming bacteria.

Feed rates and the exact dosage will depend upon the severity of contamination and the degree of control desired. This product, as is, or generated chlorine dioxide may be added to the system either intermittently or continuously below the surface of the liquid at a point where good mixing will occur.

Before using this product to generate chlorine dioxide, consult with your BETZ Energy Chemicals representative. Process fact sheets describing the operation of BETZ EnChem chlorine dioxide generators are available upon request.

BADLY FOULED SYSTEMS should be cleaned before treatment is begun.

Normal treating methods include the following:

INTERMITTENT METHOD

Treatments once or twice a day for 2-4 hours of this product to generate chlorine dioxide at the rate of 50 to 200 ppm (300 to 1200 ppm this product) are generally effective in controlling bacteria that cause corrosion, particularly sulfate-

reducing bacteria. Some waters require much more frequent treatments at the source wells. Slug treatments at a level of 400 ppm chlorine dioxide for periods greater than 4 hours may be utilized in cases of severe contamination.

Treatments two to three times a day of this product, as supplied, directly to the system at a rate of 10-200 ppm are generally effective.

CONTINUOUS METHOD

Continuous injection of chlorine dioxide generated from this product at the rate of 5 to 50 ppm is normally required to overcome microbiological plugging problems in waterflood (source and produced waters) or disposal systems.

This product, as supplied, may also be continuously fed to the system at the rate of 10 to 100 ppm.

BEST AVAILABLE COPY

ACCEPTED

SEP 19 1988

Under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, for the product is registered under EPA Reg. No. 48525-16.