PETROLITE OIL FIELD CHEMICALS GROUP

369 Marshall Avenue • St. Louis, MO 63119

Trademark of Petrolite Corporation

PETROLITE CORPORATION

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER: Corrosive. Causes eye and skin damage. Avoid breathing dust. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves when handling. May be fatal if swallowed. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless in accordance with the appropriate NPDES permit. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA. Do not contaminate water by cleaning of equipment or disposal of waste.

STATEMENT PRACTICAL TREATMENT

IF SWALLOWED: Drink egg whites, gelatin solution, or if these are not available, drink large quantities of water. Call a Physician.

IF INHALED: Remove person to fresh air.

IF ON SKIN: Immediately flush with plenty of water for 15 minutes.

IF IN EYES: Immediately flush eyes with plenty of water for 15 minutes. Call a Physician.

NOTE TO PHYSICIAN

Probable mucosal damage may contraindicate the use of gastric lavage.

DIRECTIONS FOR USE:

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

All references to ppm are ppm-active ingredient.

WATERFLOOD: To inhibit the growth of anaerobic and aerobic bacteria in all waterflood base fluids used in the recovery of oil and gas reservoirs, add X-CIDE 600 as a dry product or pre-dissolve in any base fluid, or inject directly at the well head.

FREQUENCY AND DOSE: X-CIDE 600 should be added continuously to waterflood fluids or slug-dosed depending on the bottom hole temperature and fluid chemistry at the rate of 25-100 ppm (0.009 to 0.036 lbs per barrel) depending on the quality of the base fluid.

ENHANCED OIL RECOVERY (EOR): For the effective control of bacterial growth and eliminating degradation of EOR gels and fluids used in the oil and gas industry, add X-CIDE 600 during mixing as a dry product or pre-dissolve or add by injection during the EOR procedure.

FREQUENCY AND DOSE: X-CIDE 600 should be added throughout the EOR operation at the rate of 50-100 ppm (0.018-0.036 lbs per barrel) depending on the quality of the makeup water.

DRILLING FLUIDS AND WORKOVER AND COMPLETION FLUIDS: To inhibit the growth of cellulolytic, slime-forming or sulfate-reducing bacteria in oil and gas well drilling muds and brines. X-CIDE 600 may be used as the solid or pre-dissolved in a quantity of warm water, then dosed directly into the mud or brine.

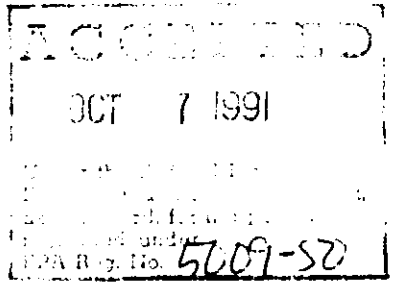
FREQUENCY AND DOSE: A single slug dose once to three times each 24 hrs. Dosing may be less frequent where contamination is low. Each slug dose should be 0.018 to .036 pounds per barrel (approximately 50 ppm-100 ppm) total mud volume.

X-CIDE® 600

Industrial Bactericide

FOR USE IN INDUSTRIAL PROCESSES ONLY
NOT FOR DOMESTIC USE.

ACTIVE INGREDIENTS:	
2-Bromo-2-nitropropane-1,3-diol	95.0%
INERT INGREDIENTS:	5.0%
	100.0%



KEEP OUT OF REACH OF CHILDREN

DANGER

SEE SIDE PANELS FOR ADDITIONAL PRECAUTIONARY STATEMENTS

EPA REG. NO. 5009-50
EPA EST. NO. 5009-MO-1

PRODUCED WATER: To inhibit the growth of slime-forming or corrosion-inducing sulfate-reducing bacteria in formation water produced by wells together with oil or gas, X-CIDE 600 may be used as the solid or pre-dissolved in a quantity of warm water or alcohol, then injected into the water-containing oil or gas stream at any convenient point. It should be injected in slug doses, not as a continuous feed.

FREQUENCY AND DOSE: Depending on severity and rapidity of contamination, X-CIDE 600 should be slug-dosed from once a week to once a month with 0.18-0.036 lbs per barrel.

WELL SQUEEZE FLUIDS: For the effective control of aerobic and anaerobic bacteria in squeeze fluids and downhole well bore areas, add X-CIDE 600 during pre-mixing of the well squeeze fluid or (in the case of direct mix injection systems) an aqueous solution may be added by direct injection at the well head during the well squeeze procedure.

FREQUENCY AND DOSE: X-CIDE 600 should be used for each well squeeze operation to ensure best results. Add X-CIDE 600 at a rate of 0.21-1.58 lbs/1000 gallons (approximately 25 ppm-190 ppm) depending on the quality of the makeup water.

INJECTION FLUIDS: For the control of contamination and corrosion from bacterial sources in fluids/waste fluids that are disposed of through injection into an approved well following approved guidelines, add X-CIDE 600 as a dry product or pre-dissolve in each volume of fluid prior to injection.

FREQUENCY AND DOSE: X-CIDE 600 should be added at a rate of 50-100 ppm (0.018-0.036 lbs per barrel) based on the water percent of the injection fluid.

FRACTURING FLUIDS: X-CIDE 600 reduces bacterial contamination and degradation of fracturing gels and fluids used as well stimulants in the oil and gas industry. X-CIDE 600 may be added during pre-mixing of the fracturing fluid or (in the case of direct mix/injection systems) an aqueous solution may be added by direct injection at the head during the fracturing procedure.

FREQUENCY AND DOSE: X-CIDE 600 should be used for each fracturing operation to ensure best results. X-CIDE 600 should be added at a rate of 0.42-0.84 lbs/1000 gallons, (approximately 50 ppm-100 ppm) depending on the quality of the makeup water.

WATER BOTTOMS IN OIL STORAGE OR TRANSPORATION TANKS: For effective control of bacterial contamination in water bottoms, in crude, and refined hydrocarbon storage systems. Above and below ground storage tanks and large marine systems are all suitable for treatment. X-CIDE 600 may be pre-dissolved in warm water to give up to a 20% concentrate. This concentrate can be injected directly into the water bottom or may be sprayed over the surface of the hydrocarbon phase and allowed to percolate through. Using a carrier solvent for addition of X-CIDE 600 into the hydrocarbon phase will provide long-term water concentrations by a diffusion process.

FREQUENCY AND DOSE: Direct addition to the water phase should be carried out every 30-60 days. Using a carrier solvent for addition to the hydrocarbon phase will provide longer term water concentrations depending on frequency of hydrocarbon movement, draining of water bottom, and other factors. X-CIDE 600 should be dosed at a rate which will achieve concentrations of 50-100 ppm in the aqueous phase. When using a carrier solvent, higher initial concentrations may be used to allow diffusion into the aqueous phase.

PIPELINE MAINTENANCE: To control aerobic and anaerobic bacteria, particularly sulfate-reducing bacteria, growth in oil and gas related production piping and transportation systems, pre-dissolve X-CIDE 600 in warm water or in a carrier solvent to give up to 20% concentrate. This concentrate can be injected directly into the the pipeline or may be added to the hydrocarbon phase. Using carrier solvent addition of the X-CIDE 600 will produce long-term water phase concentrations by a diffusion process.

FREQUENCY AND DOSE: Carrier additions will vary with the degree of contamination and volume of fluids through the pipeline. Slug treatments are recommended and can vary from daily to monthly to control growth. X-CIDE 600 should be dosed at a rate which will achieve concentrations of 25-200 ppm in the aqueous phase. When using a carrier solvent, higher concentrations may be used to allow diffusion into the aqueous phase. Dose will depend on the volume of oil or crude and the expected water fractions.

STORAGE AND DISPOSAL

STORAGE: Do not contaminate water, food or feed by storage or disposal. Keep away from heat.

PESTICIDE DISPOSAL: Pesticide wastes are acutely hazardous. Improper disposal of excess biocide, 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: Completely empty liner by shaking and tapping sides and bottom to loosen any clinging particles. Empty any residue into application equipment. Do not reuse carton or liner. Dispose of empty carton and empty liner in a sanitary landfill or by incineration, if allowed by State and local authorities. If burned, stay out of smoke.

30 LBS. NET CONTENTS