2020-08-20 Sub.No. 2020-3006

Nalco Champion (logo) BIOC16112A BIOCIDE

Solution

A MICROBIOCIDE FOR USE IN CONTROLLING BACTERIA INCLUDING SLIME-FORMING BACTERIA AND SULFATE-REDUCING BACTERIA IN OIL WELL DRILLING, OIL FIELD PROCESSING APPLICATIONS, AND OIL FIELD WATER SYSTEMS, GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS, AND GAS STORAGE FIELDS AND EQUIPMENT

REGISTRATION NO: 32684

PEST CONTROL PRODUCTS ACT

GUARANTEE: Glutaraldehyde 50%

COMMERCIAL DANGER

POISON {Poison Logo in octagon} **CORROSIVE** {Corrosive Logo in diamond}

READ THE LABEL BEFORE USING

ChampionX Canada ULC 6040 46TH STREET SE CALGARY, AB T2C 4P9 403-234-7881

PHONE IN CASE OF EMERGENCY: CHEMTREC 1-800-463-3216 (24 hours)

NET CONTENTS:

PRECAUTIONS HAZARDS TO HUMANS DANGER

KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if inhaled. May be fatal if swallowed. Harmful if absorbed through skin. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Causes asthmatic signs and symptoms in hyper-reactive individuals. Do not get in eyes, on skin, or on clothing. Avoid breathing vapor. Do not swallow. Wear goggles and a face shield, coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. Wash thoroughly with soap and water after handling. Use only in well ventilated area. Remove contaminated clothing and shoes and wash them before reuse.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic organisms. It is not to be used in circumstances that would cause or allow it to enter lakes, streams, ponds, estuaries, oceans or other waters in contravention of federal or provincial regulatory requirements. The requirements of applicable laws should be determined before using the product. DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters.

FIRST AID

IF SWALLOWED: Contact a poison control centre or doctor immediately for treatment advice. If the person is fully alert and cooperative, have the person rinse mouth with plenty of water. In cases of ingestion have the person drink 120 - 240 mL (4 to 8 ounces) of water. Do not induce vomiting. Do not attempt mouth rinse if the person has respiratory distress, altered mental status, or nausea and vomiting.

IF IN EYES: Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses, if present, after the first 5 minutes and continue washing. Call a poison control centre or doctor immediately for treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a Poison Control Centre or a doctor for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to mouth if possible. Call a Poison Control Centre or a doctor for treatment advice.

Take MSDS and, if available, the container, label or product name and Pest Control Product Registration Number with you when calling a poison control centre or a doctor, or when seeking medical attention.

TOXICOLOGICAL INFORMATION

Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage. Measures against circulatory shock, respiratory depression and convulsion may be needed.

STORAGE AND HANDLING

To prevent contamination store this product away from food and feed. BIOC16112A Biocide solutions are incompatible with many commonly used materials of construction such as steel, galvanized iron, aluminum, tin, and zinc. These solutions can be stored and handled in baked phenolic-lined steel, polyethylene, stainless steel, or reinforced epoxy-plastic equipment. This product freezes at about - 21°C. Therefore, unless the storage tank is

inside or underground, heating and insulation may be required. If heating is needed, exposure to high temperatures should be avoided. For short storage times (up to about 1 month), temperatures of up to 38°C can be tolerated but the preferred maximum storage temperature is about 27°C. A stainless steel centrifugal pump is suggested for transfer service. Spiral wound stainless steel with TEFLON® is suitable for gaskets and packing. Handle in a well-ventilated area. If vapors are irritating to the nose or eyes, special ventilation or respiratory protection (MSHA/NIOSH approved air purifying respirator equipped with an organic vapor cartridge) may be required. The product in its undiluted form must not be used in a spray or aerosol application.

DISPOSAL:

For returnable containers:

Do not use this container for any purpose. For disposal, this empty container may be returned to the point of purchase (distributor/ dealer).

For other containers:

- 1. Triple- or pressure-rinse the emptied container. Add the rinsings to the treatment site.
- 2. Follow provincial instructions for any required additional cleaning of the container prior to its disposal.
- 3. Make the empty container unsuitable for further use.
- 4. Dispose of the container in accordance with provincial/ territorial requirements.
- 5. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial/territorial regulatory agency. Contact the manufacturer and the provincial//territorial regulatory agency in case of a spill, and for cleanup of spills.

NOTICE TO USER

This pest control product is to be used only in accordance with the directions on the label. It is an offence under the *Pest Control Products Act* to use this product in a way that is inconsistent with the directions on the label. The user assumes the risk to persons or property that arises from any such use of this product.

DIRECTIONS FOR USE

DO NOT open pour more than 20 L of concentrate per day. Use an automatic addition system if using more than 20 L of concentrate per day. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes. DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters.

WATER FLOODS

BIOC16112A BIOCIDE should be added to a water flood system at a point of uniform mixing. Initial Treatment: When the system is noticeably contaminated, add 100 to 5000 ppm BIOC16112A BIOCIDE to the system (0.1 Liters to 5 Liters BIOC16112A BIOCIDE per 1000 liters flood water). Repeat until control is achieved.

Subsequent dose: When microbial control is evident, add 20 to 5000 ppm BIOC16112A BIOCIDE (0.02 Liters to 5 Liters BIOC16112A BIOCIDE per 1000 liters flood water) to the system weekly, or as needed to maintain control.

DRILLING MUDS/DRILLING, COMPLETION, WORKOVER FLUIDS

BIOC16112A BIOCIDE should be added to a drilling fluid system at a point of uniform mixing such as the circulating mud tank.

Initial Treatment: Add 50 to 1000 ppm BIOC16112A BIOCIDE (0.8 Liters to 15.1 Liters BIOC16112A BIOCIDE per 100 barrels of fluid) to a freshly prepared drilling fluid, depending on the severity of contamination.

Maintenance Dosage: Maintain a concentration of 50 to 1000 ppm BIOC16112A BIOCIDE by adding 0.8 Liters to 15.1 Liters of BIOC16112A BIOCIDE per 100 barrels of fluid, as needed, depending on the severity of contamination.

PACKER FLUIDS

BIOC16112A BIOCIDE should be added to a packer fluid at a point of uniform mixing such as circulating holding tank. Add 50 to 600 ppm BIOC16112A BIOCIDE (0.8 Liters to 9.5 Liters BIOC16112A BIOCIDE per 100 barrels of fluid) to a freshly prepared fluid, depending on the severity of contamination. Seal the treated packer fluid in the wall between the casing and production tube.

GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

BIOC16112A BIOCIDE should be added to a gas production or transmission line via direct injection. The application should be conducted to ensure maximum distribution of BIOC16112A BIOCIDE through the entire internal surface of the pipeline by adding an amount of biocide which eventually comes out the other end of the pipeline. Criteria for success of the treatment will be reduction in bacterial count and/or corrosion rates. To facilitate application it may be desirable to dilute the BIOC16112A BIOCIDE with the appropriate solvent immediately before use. The concentration in the solvent should not fall below the 500 to 5000 ppm range. Injections to the system should be made on a weekly basis, or as needed to maintain control.

GAS STORAGE WELLS AND SYSTEMS

Individual injection wells should be treated with sufficient quantity of BIOC16112A BIOCIDE to produce a concentration of 500 to 5000 ppm BIOC16112A BIOCIDE when diluted by the water present in the formation. Injection should take place before gas is injected (during the summer). Injections should be repeated yearly, or as needed to maintain control. Individual drips should be treated with a sufficient quantity of BIOC16112A BIOCIDE to produce a concentration of 200 to 2000 ppm BIOC16112A BIOCIDE when diluted by the water present in the drip. Injections should be repeated yearly, or as needed to maintain control.

HYDROTESTING

Water used to hydrotest pipelines or vessels should contain 100 to 4000 ppm (0.1 Liters to 4 Liters BIOC16112A BIOCIDE per 1000 liters water), depending on water quality and length of time the equipment will remain idle.

PIPELINE PIGGING AND SCRAPING OPERATION

Add BIOC16112A BIOCIDE to a slug of water immediately following the scraper (ideally this water volume can be kept to a minimum and contained between the scraper and a trailing pig). Sufficient BIOC16112A BIOCIDE should be added to produce a concentration of 0.1 to 1% (0.1 Liters to 1.0 Liters BIOC16112A BIOCIDE per 100 liters water), depending on the length of the pipeline and the severity of biofouling.