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BACTRON K-54 ANTIMICROBIAL SOLUTION

A MICROBIOCIDE FOR USE IN CONTROLLING SULFATE-REDUCING BACTERIA AND SLIME-FORMING BACTERIA IN AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS, RECIRCULATING COOLING AND PROCESS WATER SYSTEMS, SERVICE WATER AND AUXILIARY SYSTEMS, OIL WELL DRILLING, OIL FIELD PROCESSING APPLICATIONS, OIL FIELD WATER SYSTEMS, GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS AND GAS STORAGE FIELDS AND EQUIPMENT; SUCH AS STEAM-INJECTION WATER HOLDING TANKS, FLOOD WATER, INJECTION WATER, HOLDING POND WATER, DISPOSAL-WELL WATER, WATER HOLDING TANKS, FUEL STORAGE TANKS AND RELATED REFINERY AND OIL FIELD CLOSED INDUSTRIAL RECIRCULATING WATER HANDLING SYSTEMS.

COMMERCIAL

GUARANTEE: GLUTARALDEHYDE....50%

**REGISTRATION NO. 20425 PEST CONTROL PRODUCTS ACT** 

DANGER CORROSIVE TO EYES POISON CORROSIVE

READ THE LABEL BEFORE USING

NET CONTENTS -20 OR 210 OR 1100 LITRES

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

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

## PRECAUTIONS: HAZARDS TO HUMANS DANGER KEEP OUT OF REACH OF CHILDREN

Corrosive. Causes irreversible eye damage. Causes skin burns. Harmful if inhaled. Harmful or 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, on clothing. Do not inhale fumes or vapor. Do not swallow. Wear goggles and a face shield, coveralls over 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 pesticide is toxic to aquatic organisms. DO NOT apply in marine and/or estuarine oil fields.

DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans, or other waters. DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

FIRST AID IF IN EYES: Hold eye open and rinse slowly and gently with water for 15–20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor 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 doctor for treatment advice. IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to mouth, if possible. Call a poison control centre or doctor for further treatment advice. IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

TOXICOLOGICAL INFORMATION Corrosive. Aspiration may cause lung damage. Probable mucosal damage may contraindicate the use of gastric lavage. This product may produce a sensitization response or allergic reaction in some individuals. Measures against circulatory shock, respiratory depression and convulsion may be needed. Treat symptomatically.

DISPOSAL 1. Triple- or pressure-rinse the empty 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 requirements. 5. For information on the disposal of unused, unwanted product, contact the manufacturer or the regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

STORAGE AND HANDLING BACTRON K-54 ANTIMICROBIAL solutions are corrosive to 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, and reinforced epoxy-plastic equipment. This product freezes at about -21°C (-6°F), therefore, unless the storage tank is inside, heating and insulation may be required. If heating is needed, exposure to high temperatures should be avoided. For short times (up to about 1 month) temperatures of up to 40°C can be tolerated, but the preferred maximum storage temperature is about 25°C. A stainless steel centrifugal pump is suggested for transfer service. Spiral wound stainless steel with TEFLON® is suitable for gaskets and packing.

Keep away from fire and open flames. To prevent contamination, store this product away from food or feed.

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.

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AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS, RECIRCULATING COOLING AND PROCESS WATER SYSTEMS, SERVICE WATER AND AUXILIARY SYSTEMS This product may be used only in industrial air washer systems which have mist-eliminating components. BACTRON K-54 ANTIMICROBIAL should be added at the application rates described below, to a water treatment system at a convenient point of uniform mixing such as the basin area. Addition may be made intermittently (SLUG DOSE) or continuously. Badly fouled systems can be shock treated with BACTRON K-54 ANTIMICROBIAL. Under these conditions, blowdown should be discontinued for up to 24 hours. BACTRON K-54 ANTIMICROBIAL can be used in industrial process water systems that contain ultra filtration units and non-medical reverse osmosis membranes (where approved for compatibility by the membrane manufacturer) and associated distribution systems.

INTERMITTENT (SLUG DOSE) METHOD Initial Dose: When the system is noticeably fouled, add 0.1 to 0.4 litres (100-400 ppm) of BACTRON K-54 ANTIMICROBIAL per 1,000 litres of water in the system. Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 0.03 to 0.1 litres (30-100 ppm) of BACTRON K-54 ANTIMICROBIAL per 1,000 litres of water in the system weekly, or as needed to maintain control. Badly-fouled systems must be cleaned before treatment begins.

CONTINUOUS FEED SYSTEM Initial Dose: When the system is noticeably fouled, apply 0.1 to 0.4 litres (100-400 ppm) of BACTRON K-54 ANTIMICROBIAL per 1,000 litres of water in the system. Subsequent Dose: Maintain these treatments by starting a continuous feed of 0.015 to 0.3 litres (15300 ppm) of BACTRON K-54 ANTIMICROBIAL per 1,000 litres of water in the system per day. Badly fouled systems must be cleaned before treatment begins.

WATER FLOODS BACTRON K-54 ANTIMICROBIAL 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 BACTRON K54 ANTIMICROBIAL (0.1 to 5.0 litres BACTRON K-54 ANTIMICROBIAL per 1000 litres flood water). Repeat until control is achieved. Subsequent Dose: When microbial control is evident, add 20 to 5000 ppm BACTRON K-54 ANTIMICROBIAL (0.02 to 5.0 litres BACTRON K-54 ANTIMICROBIAL per 1000 litres flood water) to the system weekly, or as needed to maintain control.

DRILLING, COMPLETION, AND WORKOVER FLUIDS BACTRON K-54 ANTIMICROBIAL 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 BACTRON K-54 ANTIMICROBIAL (0.8 to 15.1 litres BACTRON K-54 ANTIMICROBIAL per 100 barrels of fluid) to a freshly prepared fluid, depending on the severity of contamination. Maintenance Dosage: Maintain a concentration of 50 to 1000 ppm BACTRON K-54 ANTIMICROBIAL by adding 0.8 to 15.1 litres of BACTRON K-54 ANTIMICROBIAL per 100 barrels of additional fluid, or as needed, depending on the severity of contamination.

PACKER FLUIDS BACTRON K-54 ANTIMICROBIAL should be added to a packer fluid at a point of uniform mixing such as a circulating holding tank. Add 50 to 600 ppm BACTRON K-54 ANTIMICROBIAL (0.8 to 9.5 litres BACTRON K-54 ANTIMICROBIAL 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 BACTRON K-54 ANTIMICROBIAL should be added to a gas production or transmission line via direct injection. The application should be

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conducted to ensure maximum distribution of BACTRON K-54 ANTIMICROBIAL 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 BACTRON K-54 ANTIMICROBIAL with the appropriate solvent immediately before use. The concentration in the solvent should not fall below the 500 to 5000 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 a sufficient quantity of BACTRON K-54 ANTIMICROBIAL to produce a concentration of 500 to 5000 ppm BACTRON K-54 ANTIMICROBIAL 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 BACTRON K-54 ANTIMICROBIAL to produce a concentration of 200 to 2000 ppm BACTRON K-92 ANTIMICROBIAL 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 BACTRON K-54 ANTIMICROBIAL (0.1 to 4.0 litres BACTRON K-54 ANTIMICROBIAL per 1000 litres water), depending on water quality and length of time the equipment will remain idle.

PIPELINE PIGGING AND SCRAPING OPERATIONS Add BACTRON K-54 ANTIMICROBIAL 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 BACTRON K-54 ANTIMICROBIAL should be added to produce a concentration of 0.1 to 1.0 % (0.1 to 1.0 litres BACTRON K-54 ANTIMICROBIAL per 100 litres water), depending on the length of the pipeline and the severity of biofouling.