

WB-105

Solution

A MICROBIOCIDE FOR USE IN CONTROLLING BACTERIA INCLUDING SLIME FORMING BACTERIA, SULFATE-REDUCING BACTERIA, FUNGI, YEAST AND ALGAE.

REGISTRATION NO: 34581
PEST CONTROL PRODUCTS ACT

ACTIVE INGREDIENT: Glutaraldehyde 50%

COMMERCIAL DANGER

POISON



CORROSIVE



READ THE LABEL BEFORE USING



Canadian Energy
SERVICES

Canadian Energy Services LP
1400, 332- 6th Avenue SW
Calgary, AB T2P 0B2
403-269-2800

IN CASE OF AN EMERGENCY endangering life or property involving this product, call 403-269-2800

Net contents: kg

Made in CANADA

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, 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 PRECAUTIONS

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. *Only discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters if permitted by federal or provincial regulatory agencies.*

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 SDS 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.

WB-105 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:

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.

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 suppliers or aquatic habitats by cleaning of equipment or disposal of wastes.

Only Discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans or other waters if permitted by federal or provincial regulatory agencies.

Use in offshore oil or gas exploration or production requires user to first obtain authorization from the appropriate Offshore Petroleum Board. Discharge of effluent containing this product must be in compliance with regulatory requirements.

PAPER MILLS AND PAPER MILL PROCESS WATER SYSTEMS

WB-105 should be added to the paper-making system at a point of uniform mixing such as the head box, beaters, broke chest pump, save-all tank, or white-water tank.

Initial Treatment: When the system is noticeably contaminated, add 0.25 kg to 1.5 kg of product per metric tonne of pulp or paper (dry basis) as a slug dose. Repeat until control is achieved. Heavily fouled systems should be boiled out prior to initial treatment.

Subsequent Dose: When microbial control is evident, add 0.15 kg to 1.0 kg of product per metric tonne of pulp or paper (dry basis) as a slug dose as necessary to maintain control.

PIGMENTS AND FILLER SLURRIES FOR PAPER AND PAPER BOARD

Use from 0.1 to 0.6 grams of WB-105 per Kg dry powder to produce a concentration of 100 to 600 ppm of product (based on slurry solids) in the mixed slurry.

WATER BASED COATINGS, PIGMENTS AND FILLER SLURRIES FOR PAPER AND PAPERBOARD

Note: For use in non-food contact coatings only.

Add sufficient quantities of WB-105 to produce a concentration of 100 to 600 ppm WB-105 (based on slurry solids) in the mixed slurry. When used as an in-can preservative in which paints may be applied in a residential setting, the maximum application rate for paints is 100 ppm

WATER BASED COATINGS

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Use from 0.1 to 0.6 grams of WB-105 per Kg dry powder to produce a concentration of 100 to 600 ppm of product (based on slurry solids) in the mixed slurry. When used as an in-can preservative in which paints may be applied in a residential setting, the maximum application rate for paints is 100 ppm.

AIR WASHERS AND INDUSTRIAL SCRUBBING SYSTEMS/RECIRCULATING COOLING AND PROCESS WATER SYSTEMS

This product may be used only in industrial air washers and air washer systems which have mist- eliminating components.

WB-105 should be added at the same application rates as 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 Product. Under these conditions, blowdown should be discontinued for up to 24 hours or more. WB-105 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 Badly fouled systems must be cleaned before treatment is begun.

Initial Dose: When the system is noticeably fouled, apply 100 to 400 ppm of product or 100 to 400 mL of product per 1000 litres of water in the system. Repeat until control is achieved.

Subsequent Dose: When microbial control is evident, add 30 to 100 ppm of WB-105 or 30 mL to 100 mL of WB-105 per 1000 Litres of water in the system weekly, or as needed to maintain control.

CONTINUOUS FEED METHOD Badly fouled systems must be cleaned before treatment is begun.

Initial Dose: When the system is noticeably fouled, apply 100 to 400 ppm of product or 100 to 400 mL of product per 1000 litres of water in the system.

Subsequent Dose: Maintain this treatment level by starting a continuous feed of 14 to 300 ppm of product or 14 mL to 300 mL of product per 1000 Litres of water in the system per day.

HEAT TRANSFER SYSTEMS

Evaporative Condensers, Hydrostatic Sterilizers and Retorts, and Warmers

Do not use where food contact might happen.

WB-105 should be used at the same application rates, and in the same manner as described above. It should be added to the system at a point of uniform mixing such as a basin area, sump area or other reservoir or collecting area from which the treated water will be circulated uniformly throughout the system.

WATER FLOODS

WB-105 should be added to a water flood system at a point of uniform mixing.

Initial Treatment: When the injection water is noticeably contaminated, add 100 to 5000 ppm product to the system (0.1 litres to 5 litres product per 1000 litres injection water). Repeated treatments may be required to achieve sufficient microbial control.

Subsequent Treatments: When microbial control is evident, add 20 to 5000 ppm product (0.02 litres to 5 litres product per 1000 litres injection water) to the system weekly, or as needed to maintain control.

OFFSHORE - WATER FLOODS

WB-105 should be added to an offshore water flood system at a point of uniform mixing.

Initial Treatment: When the system is noticeably contaminated, add 100 to 1000 ppm product to the system (0.1 litres to 1 litre product per 1000 litres injection water). Repeated treatments may be required to achieve sufficient microbial control.

Subsequent Treatment: When microbial control is evident, add 20 to 1000 ppm product (0.02 litres to 1 litre product per 1000 litres injection water) to the system weekly, or as needed to maintain control.

DRILLING MUDS and DRILLING, COMPLETION, WORKOVER FLUIDS

WB-105 should be added to an oilfield functional fluid system at a point of uniform mixing.

Initial Treatment: Add 50 to 1000 ppm product (0.8 litres to 15.1 litres product per 100 barrels of fluid) to a freshly prepared functional fluid, depending on the severity of contamination.

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

OFFSHORE - DRILLING MUDS and DRILLING, COMPLETION, WORKOVER FLUIDS

WB-105 should be added to an oilfield functional fluid system at a point of uniform mixing.

Initial Treatment: Add 50 to 1000 ppm product (0.8 litres to 16 litres product per 100 barrels of fluid) to a freshly prepared functional fluid, depending on the severity of contamination.

Maintenance Treatment: Maintain a concentration of 50 to 1000 ppm product by adding 0.8 litres to 16 litres of product per 100 barrels of fluid, as needed, depending on the severity of contamination.

PACKER FLUIDS

WB-105 should be added to a packer fluid at a point of uniform mixing such as circulating holding tank. Add 50 to 600 ppm product (0.8 litres to 9.5 litres product per 100 barrels of fluid) to a freshly prepared fluid, depending on the severity of contamination.

GAS PRODUCTION AND TRANSMISSION PIPELINES AND SYSTEMS

WB-105 should be added to a gas production or transmission line via direct injection. To minimize bacterial counts

and/or corrosion rates, biocide application should be conducted to ensure maximum distribution of the product through the entire internal surface of the pipeline. To facilitate application, it may be desirable to dilute the product with an appropriate solvent immediately before use. The concentration of the product in the solvent should fall within a range of 500 to 5000 ppm - 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 WB-105 to produce a concentration of 500 to 5000 ppm product when diluted by the water present in the formation. Injection should take place before gas is injected..

Injections should be repeated yearly, or as needed to maintain control. Individual drips should be treated with a sufficient quantity of product to produce a concentration of 200 to 2000 ppm product 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 of the product (0.1litres to 4 litres WB-105 per 1000 litres water), depending on water quality and length of time the equipment will remain idle. If water will be shut-in for a significant period of time (years) repeated treatments may be required.

PIPELINE PIGGING AND SCRAPING OPERATION

Add WB-105 to an appropriate volume 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 product should be added to produce a concentration of 0.1 to 1% (0.1 litres to 1.0 litre product per 100 litres water) depending on the length of the pipeline and the severity of biofouling.