

2013-1537  
2013-11-14

## **BioKlenz® 100 Biocide**

### SOLUTION

FOR USE IN CLOSED SYSTEM CHLORINE DIOXIDE GENERATORS ONLY FOR MICROBIAL CONTROL IN RECIRCULATING COOLING TOWERS AND PULP AND PAPER MILLS FOR USE IN ENHANCED OIL RECOVERY SYSTEMS & OIL-FIELD INJECTION WATERS

### COMMERCIAL (INDUSTRIAL)

**GUARANTEE:** Sodium Chlorite 25.2%

**REGISTRATION NO. 30257** – PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING

## **DANGER POISON**

CORROSIVE TO THE EYES AND SKIN

Baker Hughes Canada Company  
Gulf Canada Square  
1000-401 9<sup>th</sup> Ave. SW  
Calgary AB T2P 3C5  
Telephone Number: 1-281-276-5400

Net Contents: \_\_\_\_\_

## **PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.** Corrosive to eyes and skin. Fatal if swallowed or inhaled. Do not get in eyes, on skin, clothing or mucous membranes. Do not inhale. Wear coveralls over long sleeved shirt and long pants, chemical resistant gloves, a full face NIOSH approved respirator, socks and chemical resistant footwear during mixing, loading, application, clean up and repair.

Wash thoroughly with soap and water after handling and before eating, drinking, smoking and using the toilet. Remove contaminated clothing and wash before reuse. **DO NOT WEAR** contaminated clothing.

## **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 SWALLOWED:** Call a poison control centre or doctor immediately for treatment advice.

Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

**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.

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

## **TOXICOLOGICAL INFORMATION**

Treat symptomatically.

## **GENERAL USE PRECAUTIONS**

Read all label directions before using. Apply this product only as specified on the label.

**PHYSICAL AND CHEMICAL CAUTIONS** This material is corrosive and a strong oxidizing agent. Contact with organic matter may cause fire or explosion. Mixing with acids, or alcohol, or other chemicals may cause evolution of chlorine and chlorine dioxide gas which is toxic and may be explosive. Avoid contamination with combustible materials, such as oils, greases, solvents, and paint products as rapid burning may occur.

## **DISPOSAL AND DECONTAMINATION**

### **DISPOSAL:**

1. Triple- or pressure-rinse the emptied container thoroughly and add the rinsings to the treatment site.
2. Follow the 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 disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

### **DECONTAMINATION:**

Contain spilled material, then, add sodium sulfite at 2.8 parts per 1 part of sodium chlorite. Do not allow oxidizable or other incompatible materials to come in contact with spilled material. **DO NOT FLUSH INTO SURFACE WATERS.**

### **STORAGE**

Store in a dry, cool area (<25°C)

### **ENVIRONMENTAL HAZARDS**

Toxic to aquatic organisms.

### **DIRECTIONS FOR USE:**

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.

DO NOT discharge effluent that has been treated with chlorine dioxide generated by this product into these waters unless the effluent has been detoxified by suitable means such as waste treatment.

Open dumping is prohibited.

### **METHOD OF APPLICATION**

Chlorine dioxide generation must take place only under controlled conditions in a chlorine dioxide generator. The generators react BioKlenz® 100 Biocide with either chlorine or a chlorine solution and hydrochloric acid producing an aqueous solution of chlorine dioxide. This solution is then added at a point in the system to be treated which ensures uniform BioKlenz® 100 Biocide mixing. Do not apply BioKlenz® 100 Biocide directly to the system being treated. Follow all instructions in the chlorine dioxide generator manual carefully.

## **FOR MICROBIAL CONTROL IN RECIRCULATING COOLING TOWERS AND PULP AND PAPER MILLS**

BioKlenz® 100 Biocide is a source of chlorine dioxide for use in controlling microorganism contamination in recirculating cooling towers and pulp and paper mill process water.

The required dosage rate, frequency and concentration of chlorine dioxide may vary for each treatment, depending on severity of contamination, temperature and pH. Typical concentrations of chlorine dioxide are between 0.5 and 5 PPM on a continuous basis and between 5 PPM and 100 PPM on an intermittent shock dose basis.

To generate chlorine dioxide, use a chlorine dioxide generator, such as an Oxychlor® series chlorine dioxide generator. Please review the generator operating manual before using. If you do not have the manual, please contact your representative.

## **FOR TREATING ENHANCED OIL & GAS RECOVERY SYSTEMS (Fracture or injection waters for secondary or tertiary oil and gas recovery).**

To generate chlorine dioxide, use a chlorine dioxide generator, such as an Oxychlor® series chlorine dioxide generator. Please review the generator operating manual before using. If you do not have the manual, please contact your representative.

**Continuous Feed Method:** Treat fracture or injection water until a residual of 0.25 to 5.0 ppm chlorine dioxide is achieved.

It is recommended that, before beginning treatment, the chlorine dioxide demand of the system is established using analytical methods.

It is recommended that the residual chlorine dioxide concentration be determined using an analytical method listed in “Standard Methods”.

The required dosage rate, frequency and concentration of chlorine dioxide may vary between 0.25 and 5 ppm above the chemical (chlorine dioxide) demand of the system on a continuous basis for each treatment, depending on severity of contamination, temperature and pH.

The aqueous chlorine dioxide stream from the generator must always be injected or introduced below the surface of the treated water, preferably while flowing or mixing. Allowing the aqueous chlorine dioxide stream to free-fall through air results in a loss of chlorine dioxide gas to the atmosphere.

Loss of additive viscosity may happen when using this product. Contact your representative for advices on the use of appropriate additives.

**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.