

# PurDOX™ BCD

*Precursor Chemical Solutions*

FOR USE IN CLOSED SYSTEM CHLORINE DIOXIDE GENERATORS ONLY. For Microorganism Control in Recirculating Cooling Systems, Pulp and Paper Mills Process Water and Pulp and Paper White Water Influent Water.

In addition to this precursor, the closed system chlorine dioxide generator requires a feedstock of 78% sulfuric acid.

## COMMERCIAL

### ACTIVE INGREDIENT:

Sodium Chlorate..... 40.0%

REGISTRATION NO. 34856 PEST CONTROL PRODUCTS ACT

READ THE LABEL BEFORE USING



POISON

DANGER  
EXTREMELY FLAMMABLE  
CORROSIVE TO THE EYES AND SKIN

International Dioxide, Inc.  
40 Whitecap Drive  
North Kingstown, RI 02852  
401-295-8800

Contents: 208 – 1041 Litres

### **PRECAUTIONS:**

KEEP OUT OF REACH OF CHILDREN. DANGER. POISON. CORROSIVE. Fatal or Poisonous if swallowed. Harmful if inhaled. CORROSIVE TO EYES AND SKIN. Do not get in eyes, on skin, or on clothing. Do not inhale mist or sprays. Wear chemical-resistant coveralls over a long-sleeved shirt, long pants, protective eyewear (goggles or face shield), chemical-resistant gloves, sock and chemical-resistant footwear during mixing, loading, application, clean-up and repair. Wash after handling and before eating, smoking or using the toilet. Remove contaminated clothing and wash before reuse to avoid fire. Do not allow contaminated clothing to dry before washing onsite. DO NOT wear contaminated clothing.

### **FIRST AID:**

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

IF ON SKIN OR CLOTHING: Take off contaminated clothing and shoes immediately. 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 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 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. Call a poison control centre or doctor for treatment advice.

IF INHALED: Put on a NIOSH/MSHA self-contained breathing apparatus. 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.

### **TOXICOLOGICAL INFORMATION:**

Treat symptomatically. Overexposure to this product via the oral route can cause intravascular hemolysis, cardiac arrhythmia and renal tubular injury. Possible mucosal damage may contraindicate the use of gastric lavage.

### **ENVIRONMENTAL PRECAUTIONS:**

Toxic to aquatic organisms and birds.

This registration is granted under the *Pest Control Products Act* and does not exempt the user from any other legislative requirements.

Use of this product and management of any resulting discharge or release of effluents containing this product must also be in accordance with the *Fisheries Act* with any other applicable federal or provincial legislation.

Consult with provincial regulatory authorities on any authorizations or other requirements for use of this product and management of any resulting discharge or release of effluents containing this product.

### **PHYSICAL AND CHEMICAL CAUTIONS:**

Strong oxidizing agent. Do not contaminate with dirt, oils or organic matter of any sort. Contamination may cause violent chemical reactions, fire and explosion. Clean up chemical spills immediately. Allowing spills to dry or concentrate may cause

spontaneous combustion. In case of chemical spills, avoid bodily contact and wear appropriate protective equipment. Mixing with acids or alcohol or other chemicals may cause evolution of chlorine and chlorine dioxide gas mixtures which are toxic and may be explosive.

#### **STORAGE:**

Unless delivered in bulk, store in the original container. Store in a well ventilated area away from heat or flame. Do not drop, roll or skid drum. Keep upright. Always replace cover and keep sealed. Store in a cool, dry area <25oC. Protect from freezing. Do not store with sulfuric acid precursor. Store in fire-resistant area separate from incompatible materials such as powdered metals, organic chemicals, combustible materials and dirt. Clean up spills immediately.

#### **DISPOSAL:**

1. Triple- or pressure-rinse the empty container. 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 the 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.

#### **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**

PLACE A COPY OF THIS LABEL IN THE WORK AREA

DO NOT discharge effluent containing this product into sewer systems, lakes, streams, ponds, estuaries, oceans, or other waters.

PurDOX™ BCD is a precursor for the generation of chlorine dioxide and must be used with a suitable chlorine dioxide generator to control microorganism contamination in recirculating cooling systems or pulp and paper mill process water and pulp and paper white water influent water. Feed rates for PurDOX™ BCD are determined by the operator to achieve the desired production rate for chlorine dioxide. As described below, the appropriate production rate will depend on the severity of contamination, the degree of control desired, the size of the system and residual necessary for effective control. For all uses, the point of feed of chlorine dioxide should be below the water level to prevent volatilization of the chlorine dioxide. Chlorine dioxide must be added to the water stream at a point where adequate mixing and uniform distribution can occur.

For Pulp and Paper White Water Influent Water: For microbial control in influent water to be used as make-up water in white water systems, apply to influent water at a rate not to exceed 5.0 ppm chlorine dioxide.

For Recirculating Cooling Systems and Pulp and Paper Process Water: To control microorganisms that form slime in paper process water and that cause blockages of paper mill equipment, and to oxidize slime buildup already present, chlorine dioxide may be applied in an intermittent or continuous doses. Either method of application should maintain a residual concentration of 0.5 - 5.0 ppm of chlorine dioxide in the paper process water. If the system is badly fouled, it must be cleaned prior to treatment with chlorine dioxide. Concentrations should be between 5 and 100 ppm for intermittent shock doses.

**USE RESTRICTION:**

This product is to be used only in a closed system chlorine dioxide generator. Follow all instructions for the chlorine dioxide generator carefully and follow all safety measures required for the use of this product and the generator. Generators are to be installed, adjusted and maintained by specially trained service representatives only.