01-09-2012



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

JAN -9 2012

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

Susan M. Schaner International Dioxcide, Inc. 40 Whitecap Drive North Kingstown, RI 02852

**FILE COPY** 

Subject: Adox 750 EPA Reg. No.: 9150-8 Application Dated: October 13, 2011 Receipt Dated: October 17, 2011

Dear Ms. Schaner:

The labeling for the product referred to above submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, (FIFRA) as amended to correct the typographical error in the ingredient statement, is accepted subject to the comments and conditions listed below.

#### Conditions:

1. Revise the "Hazards to Humans and Domestic Animals" statement as follows:

DANGER. Highly Corrosive. Cause irreversible eye damage and skin burns. May be fatal if inhaled. Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or clothing. May be fatal if swallowed. Do not get on bare hands. Wear goggles, face shield or safety glasses and neoprene gloves when handling this product. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing at once to avoid a fire and wash separately before reuse. Avoid breathing fumes.

2. The following claim is not acceptable on a FIFRA label and has been removed. "This product may be used in accordance with FDA regulations in Title 21 CFR 173.300 and 21 CFR 173.325; Secondary direct food additives permitted food for human consumption." This is a processed food claim that falls under the jurisdiction of The Food and Drug Administration (FDA).

#### General Comment:

A stamped copy of the labeling accepted with conditions is enclosed. Submit one copy of your final printed labeling before distributing or selling the product bearing the revised labeling.

Should you have any questions or comments concerning this letter, please contact Wanda Henson via email at <u>Henson.Wanda@epa.gov</u> or on (703) 308-6345.

Sincerely,

Monisha Harris

Product Manager - Team 32 Regulatory Management Branch II Antimicrobials Division (7510P)

# [0001] – MASTER LABEL **ADOX<sup>®</sup> 750** 7.5% AOUEOUS SODIUM CHLORITE SOLUTION

#### [0002]

PRECURSOR FOR CHLORINE DIOXIDE AND ACIDIFED CHLORITE SOLUTIONS FOR INDUSTRIAL USE ONLY

#### [0003]

Active Ingredients	
Sodium Chlorite	7.5%
Other Ingredients	92.5%
Total:	100%

## [0004] KEEP OUT OF REACH OF CHILDREN

HCCEPTED with COMMENTS in EPA Letter Dated:

# JAN -9 2012

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No.



[0005] DANGER

#### [0006]

See Side Panels for Additional Precautionary Statements

#### [0007]

### FIRST AID

<u>If in eyes:</u> 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 center or doctor for treatment advice.

<u>If on skin or clothing:</u> Take of contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice. <u>If swallowed:</u> Call poison control center 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 the poison control center or doctor. Do not give anything by mouth to an unconscious person. <u>If inhaled:</u> 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 center or doctor for further treatment advice.

For 24 hour emergency information on this product, call Chemtrec at 1-800-424-9300 (US, Canada, Puerto Rico, Virgin Islands) 1-703-527-3887 (All Other Areas). Medical Emergency 1-800-441-3637 (outside U.S. 302-774-1000)

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

[0008] EPA Reg. No. 9150-8

[0009] EPA Est. No. XXXXXX-YYY-ZZZ

[0010] NET CONTENTS \_\_\_\_\_ GAL.

[0011] Manufactured For: INTERNATIONAL DIOXCIDE, INC. 40 Whitecap Drive North Kingstown, RI 02852





Certified to NSF/ANSI 60 Max. Use Level 93 mg/L



[0012]

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[0013]

ADOX® is a registered trademark of International Dioxcide Inc., a DuPont Company.

### [0014] PRECAUTIONARY STATEMENTS HAZARDS TO HUMAN & DOMESTIC ANIMALS

### [0015]

**DANGER:** This product becomes a fire or explosive hazard if allowed to dry. Highly corrosive, causes irreversible eye damage and skin burns. Do not get in eyes, on skin, or clothing. May be fatal if swallowed. Do not get on bare hands. Wear goggles or face shield and neoprene gloves when handling. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing at once to avoid a fire and wash separately before reuse. Avoid breathing fumes.

#### [0016]

### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish and other aquatic organisms. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

### [0017]

### PHYSICAL OR CHEMICAL HAZARDS

**DANGER.** This product becomes a fire or explosive hazard if allowed to dry. Strong oxidizing agent. Mix or dilute into water only. Mixing with acids, or alcohol, or other chemicals may cause evolution of chlorine or chlorine dioxide gas mixture which is toxic and may be explosive. Combustible materials contaminated with ADOX<sup>®</sup> 750 may burn rapidly. Keep handling areas and equipment clean and free of oils, greases, combustibles and dust. Do not contaminate product with garbage, dirt, organic matter, paint products, solvents, acids, vinegar, beverages, oils, pine oils, dirty rags or other foreign matter. Do not expose to hot surfaces, sparks or open flame.

#### [0018][OPT]

### STORAGE AND DISPOSAL

DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL

**PESTICIDE STORAGE:** Store upright in cool, dry and well-ventilated place. Avoid excessive heat or freezing. Protect from contact with other chemicals; avoid storage with organic chemicals, acids, reducers and combustible material. Keep container tightly closed when not in use. In case of spills, flush and drain promptly to sewer with large quantities of water. Do not allow liquid to dry out because this could present a fire hazard. If fire occurs, extinguish with large volume of water. Avoid exposure to high temperatures during storage. Store remote from other chemicals and combustible materials. Do not skid or slide drums.

**PESTICIDE DISPOSAL:** Do not contaminate water, food or feed by storage or disposal. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

#### **CONTAINER DISPOSAL:**

**Containers equal to or less than 5 gallons: Nonrefillale container. Do not reuse or refill this container.** Triple rinse (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container <sup>1</sup>/<sub>4</sub> full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**Containers over 5 gallons: Nonrefillable container. Do not reuse or refill this container**. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container <sup>1</sup>/<sub>4</sub> full with water. Replace and tighten closures. Tip container on its side and roll back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over onto its other end and tip back and forth several times. Empty the rinsate into application equipment or mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**EMERGENCY HANDLING:** In case of contamination or decomposition, do not reseal container. Isolate in an open, well-ventilated area. Flood with large volumes of water. Cool unopened drums in vicinity by water spray

#### [0019]

**NOTICE:** Seller expressly warrants that the product conforms to its chemical description. There are no warranties associated with the sale of the product either express or implied including, but not limited to, the warranties of fitness for a particular purpose or use.

#### [0020]

#### **DIRECTIONS FOR USE**

#### [0021]

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

#### [0022]

*†* Not approved for use in California

#### [0023]

### METHOD OF APPLICATION

ADOX® 750 is a precursor for the generation of chlorine dioxide. DO NOT ADD ADOX® 750 directly to the system being treated. Chlorine dioxide solutions can be generated from ADOX® 750 by several common methods including:

- 1. The chlorine method which utilizes a ADOX® 750 and chlorine gas, or
- 2. The hypochlorite method which utilizes ADOX® 750, a hypochlorite solution and an acid or,
- 3. The Acid-Chlorite method which utilizes ADOX® 750 and an acid, or
- 4. The electrolytic method which utilizes ADOX® 750, with sodium chloride as needed.

ADOX® 750 can also be used to form acidified sodium chlorite solutions by mixing the product with Generally Recognized As Safe (GRAS) acids such as citric, phosphoric or acetic acid. Add the generated chlorine dioxide solution to a point in the system which ensures uniform mixing. Your International Dioxcide, Inc. representative can guide you in the selection, installation and operation for feed systems.

#### [0024]

### APPLICATIONS

### [0025] – [OPT.]

**POTABLE WATER AND WASTEWATER DISINFECTION**: For most numicipal and other potable water systems, a chlorine dioxide residual concentration up to 2.0 ppm is sufficient to provide adequate disinfection. Typically, the target residual concentrations range from 0.20 - 0.75 ppm. Monitor the distribution system to ensure that the chlorite concentration does not exceed its maximum contaminant level (MCL) of 1 mg/L and that chlorine dioxide does not exceed its maximum residual disinfection level (MRDL) of 0.8 mg/L. For wastewater and sewage applications, residual chlorine dioxide concentrations up to 5.0 ppm are generally adequate.

## [0026] – [OPT.]

**†POTABLE WATER SYSTEMS: Nitrification:** to control the build up of nitrification in the water distribution system. Utilize a chemical metering system to add this product so that the resulting dose of chlorine dioxide or sodium chlorite to control nitrification does not exceed the MRDL of 0.8mg/L for ClO2, or the MCL of 1.0 mg/L for chlorite ion.

Use of this product in public water systems (drinking water utilities) triggers monitoring and compliance requirements under 40 CFR 141. Among other requirements the user of this product is required to conduct daily monitoring for chlorine dioxide and chlorite at the point of addition and to comply with standards for chlorine dioxide and chlorite. The user of this product is required to contact State or primary drinking water programs to determine specific monitoring, compliance, reporting, and record-keeping requirements in order to avoid adverse human health effects and/or non-compliance with such requirements."

### [0027] – [OPT.]

FOOD PROCESSING PLANTS, DAIRIES, BOTTLING PLANTS AND BREWERIES, FOOD PLANTS PROCESS WATER: For microbial control in typical food processing water systems, such as flume transport, chill water systems, hydrocoolers, and other water systems, apply ADOX<sup>®</sup> 750 through a chlorine dioxide generation system to achieve a chlorine dioxide residual concentration ranging from 0.25 to 3.0 ppm.

#### 0028] – [OPT.]

**POULTRY PROCESSING WATER:** Use ADOX<sup>®</sup> 750 to generate chlorine dioxide for use as an antimicrobial agent in water used in poultry processing in an amount not to exceed 3 ppm residual chlorine dioxide as determined by an appropriate method.

### [0029] – [OPT.]

AQUEOUS DISINFECTIONS SYSTEMS FOR CIP CLEANING: If the concentration of chlorine dioxide generated from ADOX<sup>®</sup> 750 exceeds 5.0 ppm, a potable water rinse should follow treatment. Care should be taken to ensure the biological and chemical quality of the potable water.

### [0030] – [OPT.]

GENERAL INDUSTRIAL PROCESS WATER TREATMENT (OILFIELD INJECTION WATER, RECIRCULATING COOLING TOWERS, AND †WHITE WATER PAPER MILL SYSTEMS): For control of microbial slime, these systems will require a chlorine dioxide residual concentration ranging between 0.25 and 5.0 pp.m.

### [0031] – [OPT.]

**†ONCE-THROUGH COOLING WATER SYSTEMS**. Control of mollusks can be effectively accomplished using ADOX<sup>®</sup> 750 as directed in commercial and industrial once-through cooling water systems. ADOX<sup>®</sup> 750 may be fed on a continuous or slug basis depending on the degree of system fouling.

SLUG DOSE: Add 42 to 210 lbs. of chlorine dioxide per million gallons of water (5 to 25 ppm).

CONTINUOUS DOSE: Add 2 to 16 lbs. of chlorine dioxide per million gallons of water (0.25 to 2 ppm).

#### [0032] – [OPT.]

#### IN FOOD PROCESSING FACILITIES

For use as a terminal food contact surface sanitizing rinse conforming to 40 CFR 180.940 paragraph (b) and (c) not requiring a subsequent potable water rinse. This solution may be used on hard surfaces such as dairy processing equipment, food processing equipment and utensils.

- 1. All equipment & utensils should be thoroughly cleaned to remove gross food particles and soil by pre-flush or pre-scrape and where necessary a pre-soak treatment. The surfaces or objects should then be cleaned with a detergent or cleaner followed by a potable water rinse before application of the sanitizing solution.
- 2. To prepare a 200 ppm chlorine dioxide sanitizing use solution add 1 oz. of ADOX<sup>®</sup> 750 to 2.5 gallons of water and then acidify to pH 2.6 with a Generally Recognized As Safe (GRAS) acid such as hydrochloric, citric, phosphoric or acetic acid or add 1 gram of Activator C or 9 grams of Activator K to the solution. Allow to stand for at least 15 minutes before use. Alternatively to minimize worker handling, an automated system can be utilized that will safely react ADOX<sup>®</sup> 750 with a GRAS Acid and safely dilute the solution to the 200 ppm chlorine dioxide sanitizing use solution.
- 3. Fill, immerse, circulate, wipe or spray the target surface with the sanitizing solution making sure the surface area is thoroughly wet for at least one minute. Hard to reach inplace equipment, pipes, closed vessels, etc. must be filled with the sanitizing solution to ensure contact of all surfaces. Use suitable breathing apparatus when spraying the solution on external equipment.
- 4. Allow the sanitizing solution to drain from all treated surfaces and air dry. Do not rinse treated surface.
- 5. The above solution may not be reused for sanitizing, but may be diluted 1:5 with wate; and used for cleaning of walls, floors and drains of the plant.