



# M A T E R I A L   S A F E T Y   D A T A   S H E E T

24-Hour Emergency #: (U.S.) 1-800-535-5053 / (Outside U.S.) 352-323-3500

## SECTION I: Product & Company Identification

Product Name: **Birex<sup>SE</sup>®**  
Catalog Number: **BI024, BI025, BI048, BC144, BI004, BI004IK**  
Distributed by: Biotrol  
13705 Shoreline Court East  
Earth City, MO 63045  
1.800.822.8550

## SECTION II: Health Hazard Information

**Appearance:** Yellow to amber liquid/Mild and pleasant odor

### **Routes of Exposure:**

**Eye Contact:** Concentrate severely irritating to eyes.

**Skin Contact:** Concentrate severely irritating to skin.

**Inhalation:** Mists of use-solution may be irritating to nasal passages and lungs.

**Ingestion:** Will cause upset to stomach.

**NFPA 704 Hazard Rating:** Health (3); Fire (2); Reactivity (0)

## SECTION III: Hazardous Components

| Hazardous Components         | CAS No.    | % by Weight | Oral LD50        | Inhalation LC50                   |
|------------------------------|------------|-------------|------------------|-----------------------------------|
| p-tertiary amyphenol         | 80-46-6    | 5-10        | 1830 mg/kg (rat) | ND                                |
| #2 phenylphenol              | 90-43-7    | 5-10        | 2700 mg/kg (rat) | >36 mg/m <sup>3</sup> /4 hr (rat) |
| Phosphoric acid              | 7664-38-2  | 15.0        | 1530 mg/kg (rat) | ND                                |
| Isopropranol (Propan-2-ol)   | 67-63-0    | 7.5         | 6.48 ml/kg (rat) | >5000 ppm/1 hr (rat)              |
| Dodecylbenzene sulfonic acid | 68584-22-5 | <5          | ND               | ND                                |

## SECTION IV: First Aid Procedures

**Eye Contact:** Flush eyes immediately with water for at least 15 min. Seek medical attention if irritation occurs.

**Skin Contact:** Flush skin immediately with plenty of water for at least 15 min. Seek medical attention if irritation occurs.

**Inhalation:** Remove affected persons to fresh air. If not breathing, give artificial respiration. Seek medical attention immediately.

**Ingestion:** Do not induce vomiting and seek medical attention. Do not give anything by mouth to an unconscious person. If conscious, drink large quantity of milk or water.

## **SECTION V: Fire Fighting Measures**

**Conditions of Flammability/Flash Point/Auto-Ignition Temperature:** 111°F (44°C)

**Method:** Closed cup

**Flammable Limits in Air % by Volume:** Does not support combustion

**Extinguishing Media:** Foam, CO<sub>2</sub>

**Upper Flammability Limit:** ND

**Lower Flammability Limit:** ND

**Explosibility Data:** ND

**Hazardous Combustion Products:** Forced ignition of dried residues may produce CO<sub>x</sub> and SO<sub>x</sub>

## **SECTION VI: Accidental Release Measures**

**In case of spill:** Neutralize with sodium bicarbonate, or absorb on appropriate material before placing in suitable container for disposal. Wear appropriate personal protection during removal of spillages. Flush spill site with large quantities of clean water to a sanitary sewer. Prevent washings from entering surface water/storm drains. Observe local regulations.

## **SECTION VII: Handling and Storage**

**Handling:** Product will withstand an occasional accidental freezing. Thoroughly thaw and agitate before use.

**Storage:** Do not contaminate water, food, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

## **SECTION VIII: Personal Protection**

### **Occupational Exposure Limits**

| <b>Component</b> | <b>ACGIH TLV</b>    | <b>ACGIH STEL</b>   | <b>OSHA PEL</b>     | <b>OSHA STEL</b>    |
|------------------|---------------------|---------------------|---------------------|---------------------|
| Isopropranol     | 200 ppm             | 500 ppm             | 400 ppm             | -                   |
| Phosphoric acid  | 1 mg/m <sup>3</sup> | 3 mg/m <sup>3</sup> | 1 mg/m <sup>3</sup> | 3 mg/m <sup>3</sup> |

### **Personal Protection**

Respirator Protection: Not required

Protective Gloves: Recommended

Eye Protection: Safety glasses or goggles

Other protective clothing and equipment: NA

Engineering Controls/Ventilation: Adequate ventilation to maintain air concentrations below established limits

## **SECTION IX: Physical and Chemical Properties**

**Solubility in water:** Complete

**Specific gravity:** ~1.108

**Physical State/Appearance/Odor:** Yellow to amber liquid/Mild and pleasant odor

**pH:** (Concentrate): ~1.0; (1:256 solution): 2.6

**Odor Threshold:** ND

**Vapor Pressure:** ND

**Vapor Density:** ND

**Evaporation Rate:** ND

**Boiling Point:** ND

**Freezing Point:** ND

**Coefficient of Water/Oil Distribution:** ND

## **SECTION X: Stability and Reactivity**

**Stability:** Stable

**Hazardous Polymerization:** Will not occur

**Incompatible Materials:** Strong oxidizers and alkaline chemicals

**Conditions to Avoid/Conditions of Reactivity:** None known

**Hazardous Decomposition or Byproducts:** Forced ignition of dried residues may produce CO<sub>x</sub> and SO<sub>x</sub>

## **SECTION XI: Toxicological Information**

### **Acute (Primary Routes of Exposure)**

**Eyes:** Use dilution slightly irritating to eyes. Concentrate severely irritating to eyes.

**Skin:** Concentrate severely irritating to skin.

**Inhalation:** Inhalation toxicity >62 mL/l @1:256 for 4 hours. Mists of use-solution may be irritating to nasal passages and lungs.

**Ingestion:** Oral LD<sub>50</sub> = 6,000 mg/kg (male rat); 4,330 mg/kg (female rat). Will cause upset to stomach.

### **Long Term Exposure**

**Carcinogenicity:** IARC, NTP, and OSHA do not list this product or its ingredients as carcinogens. 2-phenylphenol produced urinary bladder tumors in male rats and liver tumors in male mice when fed exaggerated doses.

**Reproductive Toxicity/Teratogenicity/Mutagenicity/Toxicologically Synergistic Products:** ND

## **SECTION XII: Ecological Information**

NA

## **SECTION XIII: Disposal Considerations**

Do not contaminate ponds, waterways, or ditches with chemical or used containers. Empty containers should be rinsed thoroughly before either being discarded in an appropriate waste container or offered for reconditioning/recycling. Empty containers should not be used for other purposes. Unused material may be a hazardous waste due to its low pH and subsequent corrosivity. Disposal of unwanted product should be done in accordance with federal, state, and local regulations. Product may be flushed to a sanitary sewer with copious amounts of water, if in accordance with federal, state, and local regulations. For additional guidance, contact the State Water Board or the Regional Office of the EPA.

## **SECTION XIV: Transport Information**

**Ground/Air/Sea:** Non-hazardous

## **SECTION XV: Regulatory Information**

**State Regulations:** May contain trace amounts of chemicals found on the California Prop. 65 list.

**US EPA Regulations:** 2-phenylphenol subject to reporting under section 313 of Title III (SARA) and 40 CFR 372

**WHMIS Classification:** E – Corrosive Material

This Product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulation.

## **SECTION XVI: Other Information**

The information on this sheet is not a specification and does not guarantee specific properties. The information is intended to provide general knowledge as to health and safety based on current knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instruction or recommendations are not followed.

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