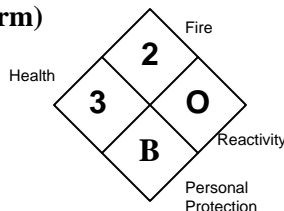


MATERIAL SAFETY DATA SHEET

BIREX^{SE}

CATALOG NUMBER: **BI004, BI004IK, BI024, BI025, BI048, BC144, & S01 (Concentrate Form)**



SECTION I – Distributor

Biotrol
13705 Shoreline Court East, Earth City, MO 63045
1-800-822-8550

SECTION II – Hazardous Ingredients / Identity

Hazardous Components(s) (Chemical and common names)	OSHA PEL	ACGIH TVL	% by Weight	CAS Number
p-tertiary amylphenol	N/A	N/A	7.6%	80-46-6
#2 – phenylphenol	N/A	N/A	7.7%	90-43-7
Phosphoric acid*	1mg/m ³	1mg/m ³	15.0%	7664-38-2
Isopropanol (Propan-2-ol)**	500ppm	200ppm	7.5%	67-63-0
Dodecylbenzene sulfonic acid	N/A	N/A	< 5%	68584-22-5

*ACGIH STEL and OSHA STEL = 3 mg/m³

**ACGIH STEL = 500 ppm

Hazards Identification: Severely irritating to eyes and skin (concentrate form). Combustible.

Transport Information: Ground/air/sea. Non-hazardous.

Regulatory Information: USA State Regulations: May contain trace levels of formaldehyde.

US EPA Regulations: #2 – Phenylphenol subject to reporting under Sec. 313 of Title III (SARA) and 40 CFR 372.

SECTION III – Physical & Chemical Characteristics

Boiling Point: 212 °F

Solubility in Water: Complete

Specific Gravity: 1.108

Vapor Pressure / Density: Unknown

Freezing Point: 0-15 °F. Product will withstand an occasional accidental freezing without loss in its normal performance characteristics. It must be thoroughly thawed and agitated before being used.

Appearance and Odor: pH 1.0 (Concentrate form); pH 2.6 (Use-solution form – 1:256). Yellow to amber liquid; mild, pleasant odor.

SECTION IV – Fire & Explosion Data

Flash Point: 111 °F (44 °C) **Method:** Closed Cup

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

Extinguishing Media: Foam, CO₂

Auto-ignition Temperature; Special Fire Fighting Procedures; Unusual Fire and Explosion Hazards: N/A

SECTION V – Physical Hazards (Reactivity Data)

Stability: Stable

Hazardous Polymerization: Will not occur

Hazardous Decomposition Products: Forced ignition of dried residues may produce CO_x and SO_x.

Conditions / Materials to Avoid: Strong oxidizers and alkaline chemicals. This is a complete product. Do not add other chemicals to concentrate or use-solutions.

SECTION VI – Health Hazards

Acute: Concentrate severely irritating to tissues

Signs and symptoms of exposure:

Skin / Eye contact – Concentrate severely irritating to skin and eyes. Use-solution slightly irritating to eyes.

Ingestion – Oral LD₅₀ = 6,000 mg/kg (male rat); 4,330 mg/kg (female rat)
Will cause upset to stomach.

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

Chemical Listed as Carcinogen or Potential Carcinogen: National Toxicology Program; I.A.R.C. Monographs 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.

SECTION VII – Emergency First Aid Procedures

Skin Contact: Immediately flush with plenty of water for at least 15 minutes. Call a physician. Remove and wash contaminated clothing before reuse.

Eye Contact: Flush eyes immediately with water for at least 15 minutes. Get medical attention if irritation develops.

Ingestion: DO NOT INDUCE VOMITING. Drink large quantities of water or milk and call a physician. Do not give anything by mouth to an unconscious person.

Inhalation: Remove patient to fresh air. If not breathing, give artificial respiration. Get medical attention.

SECTION VIII – Special Precautions and Spill/Leak Procedures

Precautions to be Taken in Handling and Storing: Do not contaminate food, water, or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container but rinse thoroughly and discard in an appropriate container. Ensure suitable personal protection during removal of spillages. Spills should be contained and may be cautiously neutralized with sodium bicarbonate, or absorbed on appropriate material and placed in a container for disposal. Flush spill site with large quantities of water to a sanitary sewer. Washings should be prevented from entering water/storm drains. Local regulations should be observed.

Waste disposal method: Waste solutions may be sewerer with copious amounts of water, if in accordance with state, local, and federal regulations. For additional guidance, contact the State Water Board or the Regional Office of the EPA.

Other Precautions: Read and observe all labeled precautions.

SECTION IX – Special Protection Information / Control Measures

Protective wear: Goggles or safety glasses. Rubber gloves recommended.

Ventilation: Adequate ventilation to maintain air concentrations below established limits.

Respiratory Protection: Not Required.

IMPORTANT

While seller believes that the information contained herein is accurate, such information is offered solely for its customers' consideration and verification under their specific use conditions. This information is not deemed a warranty or representation of any kind for which seller assumes legal responsibility.



BIOTROL™

24-Hour Emergency No. (U.S.) 1-800-535-5053
(Outside U.S.) 352-323-3500

Questions or Comments? 1-800-325-1881