



BIREX^{SE III}

BIOTROL™ Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Revision Date: 8/07/2020 Version: 1.0

SECTION 1: Identification

1.1. Product Identifier

Product Name: Birex SE III
Product Code: 296040, 296041, 296042, and 296043

1.2. Intended Use of the Product

Use of the substance/mixture: Sterile Disinfectant/Cleaner. For professional use only.

1.3. Name, Address, and Telephone of the Responsible Party

Distributed by:
Biotrol
13705 Shoreline Court East
Earth City, MO 63045
1.800.822.8550

1.4. Emergency Telephone Number

Infotrac:
24-Hour Number – (U.S.): 1-800-535-5053
Outside of U.S. – 352-323-3500

SECTION 2: Hazards Identification

2.1. Classification of the Substance or Mixture

GHS-US classification

Met. Corr. 1 H290
Skin Corr. 1C H314
Eye Dam. 1 H318

Full text of hazard classes and H-statements : see section 16

2.2. Label Elements - This label is regulated by the EPA under FIFRA. Refer to Section 15.

GHS-US Labeling

Hazard Pictograms (GHS-US)



GHS05

Signal Word (GHS-US)

Hazard Statements (GHS-US)

Precautionary Statements (GHS-US)

- : Danger
- : H290 - May be corrosive to metals.
- : H314 - Causes severe skin burns and eye damage.
- : H318 - Causes serious eye damage.
- : P260 - Do not breathe vapors, mist, or spray.
- : P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
- : P280 - Wear protective gloves, protective clothing, and eye protection.
- : P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
- : P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
- : P304+P340 - IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.
- : P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- : P310 - Immediately call a poison center or doctor.
- : P363 - Wash contaminated clothing before reuse.
- : P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Other Hazards: Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 3: Composition/Information On Ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
o-Benzyl-p-chlorophenol	(CAS No) 120-32-1	10-15	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT RE2, H373
Potassium hydroxide	(CAS No) 1310-58-3	5-10	Met. Corr. 1, H290 Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314 Eye Dam. 1, H318
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	(CAS No) 68439-57-6	1-10	Skin Irrit. 2, H315 Eye Dam. 1, H318
2-Phenylphenol	(CAS No) 90-43-7	5-10	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Comb. Dust
Isopropyl alcohol	(CAS No) 67-63-0	1-5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Sodium xylenesulfonate	(CAS No) 1300-72-7	1-5	Eye Irrit. 2A, H319
Phosphoric acid	(CAS No) 7664-38-2	1-5	HHNOC 1 Met. Corr. 1, H290 Acute Tox. 4 (Oral) H302 Skin Corr. 1B, H314 Eye Dam. 1, H318

Full text of H-phrases: see section 16

The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]. More than one of the ranges of concentration prescribed by Hazardous Products Regulations has been used where necessary, due to varying composition.

SECTION 4: First Aid Measures

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

First-aid Measures After Skin Contact: Remove contaminated clothing. Immediately flush skin with plenty of water for at least 15-20 minutes. Immediately call a POISON Center or doctor/physician. Wash contaminated clothing before reuse.

First-aid Measures After Eye Contact: Rinse cautiously with water for 15-20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: Causes severe skin burns and eye damage.

Symptoms/Injuries After Inhalation: Corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical burns.

Symptoms/Injuries After Eye Contact: Causes permanent damage to the cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: This material is harmful orally and can cause adverse health effects or death in significant amounts. May cause burns or irritation of the linings of the mouth, throat and gastrointestinal tract.

Chronic Symptoms: May cause damage to brain, kidneys, liver, or nervous system through prolonged or repeated exposure.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, foam, carbon dioxide (CO₂). Water may be ineffective but water should be used to keep fire-exposed container cool.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

5.2. Special Hazards Arising from the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Contact with metallic substances may release flammable hydrogen gas.

Reactivity: May be corrosive to metals. Hazardous reactions will not occur under normal use conditions.

5.3. Advice for Firefighters

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Precautionary Measures: Fire: Exercise caution when fighting any chemical fire.
Firefighting Instructions: Use water spray or fog for cooling exposed containers.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: Carbon oxides (CO, CO₂), Halogenated Compounds, Sulfur oxides, Metal oxides, Hydrogen chloride.
Other information: Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not breathe vapor, mist or spray. Do not get in eyes, on skin or on clothing. Avoid all contact with skin, eyes, or clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).
Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.
Emergency Procedures: Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Cautiously neutralize spilled liquid. Ventilate area. Absorb spillage to prevent material damage. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for Exposure Controls and Personal Protection and Section 13 for Disposal Considerations.

SECTION 7: Handling And Storage

7.1. Precautions for Safe Handling

Additional Hazards When Processed: May be corrosive to metals. May release corrosive vapors.

Precautions for Safe Handling: Wash hand and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle empty containers with care because they may still present a hazard. Do not get in eyes, on skin or on clothing. Do not breathe vapors, mists, and spray.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Keep container closed when not in use. Store in a cool dry place. Keep/store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in original container or corrosive resistant and/or lined container. Storage areas should be periodically checked for corrosion and integrity.

Pesticide Storage: Do not store near heat or open flame. If frozen, thaw and remix before use.

Incompatible Products: Strong acids, Strong oxidizers, Halogenate compounds, Metals. May be corrosive to metals.

7.3. Specific End Use(s)

Disinfectant/Cleaner. For professional use only.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Isopropyl alcohol (67-63-0)		
USA ACGIH	ACGIH TWA (ppm)	200 ppm
USA ACGIH	ACGIH STEL (ppm)	400 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA ACGIH	Biological Exposure Indices (BEI)	40 mg/l Parameter: Acetone - Medium urine-Sampling time: end of shift at end of work week (background, nonspecific)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	980 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	400 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	980 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	400 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	1225 mg/m ³
USA NIOSH	NIOSH REL (STEL) (ppm)	500 ppm
USA IDLH	US IDLH (ppm)	2000 ppm (10% LEL)
Alberta	OEL STEL (mg/m ³)	984 mg/m ³
Alberta	OEL STEL (ppm)	400 ppm
Alberta	OEL TWA (mg/m ³)	492 mg/m ³
Alberta	OEL TWA (ppm)	200 ppm
British Columbia	OEL STEL (ppm)	400 ppm

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

British Columbia	OEL TWA (ppm)	200 ppm
Manitoba	OEL STEL (ppm)	400 ppm
Manitoba	OEL TWA (ppm)	200 ppm
New Brunswick	OEL STEL (mg/m ³)	1230 mg/m ³
New Brunswick	OEL STEL (ppm)	500 ppm
New Brunswick	OEL TWA (mg/m ³)	983 mg/m ³
New Brunswick	OEL TWA (ppm)	400 ppm
Newfoundland & Labrador	OEL STEL (ppm)	400 ppm
Newfoundland & Labrador	OEL TWA (ppm)	200 ppm
Nova Scotia	OEL STEL (ppm)	400 ppm
Nova Scotia	OEL TWA (ppm)	200 ppm
Nunavut	OEL STEL (ppm)	400 ppm
Nunavut	OEL TWA (ppm)	200 ppm
Northwest Territories	OEL STEL (ppm)	400 ppm
Northwest Territories	OEL TWA (ppm)	200 ppm
Ontario	OEL STEL (ppm)	400 ppm
Ontario	OEL TWA (ppm)	200 ppm
Prince Edward Island	OEL STEL (ppm)	400 ppm
Prince Edward Island	OEL TWA (ppm)	200 ppm
Québec	VECD (mg/m ³)	1230 mg/m ³
Québec	VECD (ppm)	500 ppm
Québec	VEMP (mg/m ³)	985 mg/m ³
Québec	VEMP (ppm)	400 ppm
Saskatchewan	OEL STEL (ppm)	400 ppm
Saskatchewan	OEL TWA (ppm)	200 ppm
Yukon	OEL STEL (mg/m ³)	1225 mg/m ³
Yukon	OEL STEL (ppm)	500 ppm
Yukon	OEL TWA (mg/m ³)	980 mg/m ³
Yukon	OEL TWA (ppm)	400 ppm
Potassium hydroxide (1310-58-3)		
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
Alberta	OEL Ceiling (mg/m ³)	2 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	2 mg/m ³
Manitoba	OEL Ceiling (mg/m ³)	2 mg/m ³
New Brunswick	OEL Ceiling (mg/m ³)	2 mg/m ³
Newfoundland & Labrador	OEL Ceiling (mg/m ³)	2 mg/m ³
Nova Scotia	OEL Ceiling (mg/m ³)	2 mg/m ³
Nunavut	OEL Ceiling (mg/m ³)	2 mg/m ³
Northwest Territories	OEL Ceiling (mg/m ³)	2 mg/m ³
Ontario	OEL Ceiling (mg/m ³)	2 mg/m ³
Prince Edward Island	OEL Ceiling (mg/m ³)	2 mg/m ³
Québec	PLAFOND (mg/m ³)	2 mg/m ³
Saskatchewan	OEL Ceiling (mg/m ³)	2 mg/m ³
Yukon	OEL Ceiling (mg/m ³)	2 mg/m ³
Phosphoric acid (7664-38-2)		
USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³
USA ACGIH	ACGIH STEL (mg/m ³)	3 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	3 mg/m ³
USA IDLH	US IDLH (mg/m ³)	1000 mg/m ³
Alberta	OEL STEL (mg/m ³)	3 mg/m ³
Alberta	OEL TWA (mg/m ³)	1 mg/m ³
British Columbia	OEL STEL (mg/m ³)	3 mg/m ³
British Columbia	OEL TWA (mg/m ³)	1 mg/m ³
Manitoba	OEL STEL (mg/m ³)	3 mg/m ³
Manitoba	OEL TWA (mg/m ³)	1 mg/m ³
New Brunswick	OEL STEL (mg/m ³)	3 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	1 mg/m ³
Newfoundland & Labrador	OEL STEL (mg/m ³)	3 mg/m ³
Newfoundland & Labrador	OEL TWA (mg/m ³)	1 mg/m ³
Nova Scotia	OEL STEL (mg/m ³)	3 mg/m ³
Nova Scotia	OEL TWA (mg/m ³)	1 mg/m ³
Nunavut	OEL STEL (mg/m ³)	3 mg/m ³
Nunavut	OEL TWA (mg/m ³)	1 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	3 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	1 mg/m ³

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Ontario	OEL STEL (mg/m ³)	3 mg/m ³
Ontario	OEL TWA (mg/m ³)	1 mg/m ³
Prince Edward Island	OEL STEL (mg/m ³)	3 mg/m ³
Prince Edward Island	OEL TWA (mg/m ³)	1 mg/m ³
Québec	VECD (mg/m ³)	3 mg/m ³
Québec	VEMP (mg/m ³)	1 mg/m ³
Saskatchewan	OEL STEL (mg/m ³)	3 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	1 mg/m ³
Yukon	OEL STEL (mg/m ³)	3 mg/m ³
Yukon	OEL TWA (mg/m ³)	1 mg/m ³

8.2 Exposure Controls

Appropriate Engineering Controls

: Ensure all national/local regulations are observed. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

: Personal protective equipment should be selected based upon the conditions under which this product is handled or used. The following pictograms represent the minimum requirements for personal protective equipment. Protective clothing. Gloves. Protective goggles.



Hand Protection

: Wear protective gloves.

Eye Protection

: Chemical safety goggles or safety glasses.

Skin and Body Protection

: Wear suitable protective clothing.

Respiratory Protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Other Information

: When using, do not eat, drink or smoke.

SECTION 9: Physical And Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Dark amber, clear
Odor	: Characteristic phenol
Odor Threshold	: No data available
pH	: 12.46
Evaporation rate	: No data available
Melting Point	: No data available
Freezing Point	: No data available
Boiling Point	: No data available
Flash Point	: >200 °F (93.33 °C) (TCC)
Auto-ignition Temperature	: No data available
Decomposition Temperature	: No data available
Flammability	: No data available
Vapor Pressure	: No data available
Relative Vapor Density at 20 °C	: No data available
Relative Density	: No data available
Specific Gravity	: 1.106
Solubility	: Complete in water.
Partition coefficient: n-octanol/water	: No data available
Viscosity	: 11.1cP @ 25°C (77°F)

9.2 Other Information

No additional information available

SECTION 10: Stability And Reactivity

10.1 Reactivity:

May be corrosive to metals. Hazardous reactions will not occur under normal conditions.

10.2 Chemical Stability:

Stable under normal use conditions.

10.3 Possibility of Hazardous Reactions:

Hazardous polymerization will not occur.

10.4 Conditions to Avoid:

Direct sunlight, extremely high or low temperatures, incompatible materials.

Safety Data Sheet

According to Federal Register / Vol. 77, No: 58 / Monday, March 26, 2012 / Rules and Regulations

10.5 Incompatible Materials:

Strong acids, Strong oxidizers, Halogenated compounds, Metals. May be corrosive to metals.

10.6 Hazardous Decomposition Products:

None known.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

Acute Toxicity (Oral): Oral: Harmful if swallowed.

Acute Toxicity (Dermal): Dermal: Not classified.

Acute Toxicity (Inhalation): Inhalation dust, mist: Not classified.

Birex SE III	
LD50 Oral Rat	≈ 1750 mg/kg
LD50 Dermal Rat	> 5000 mg/kg
LC50 Inhalation Rat	> 0.63 mg/l (Exposure time: 4 h)

Skin Corrosion/Irritation: Causes severe skin burns and eye damage.

pH: 12.46

Eye Damage/Irritation: Causes serious eye damage.

pH: 12.46

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Symptoms/Injuries After Inhalation: Corrosive to the respiratory tract.

Symptoms/Injuries After Skin Contact: Causes severe irritation which will progress to chemical burns.

Symptoms/Injuries After Eye Contact: Causes permanent damage to cornea, iris, or conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects. May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract.

Chronic symptoms: None known

Information on Toxicological Effects: Ingredient(s)

LD50 and LC50 Data:

2-Phenylphenol (90-43-7)	
LD50 Oral Rat	2733 mg/kg
LD50 Dermal Rat	> 2000 mg/kg
LC50 Inhalation Rat	> 0.949 mg/l (Exposure time: 1 h)
o-Benzyl-p-chlorophenol (120-32-1)	
LD50 Oral Rat	1700 mg/kg
Isopropyl alcohol (67-63-0)	
LD50 Dermal Rabbit	4059 mg/kg
LC50 Inhalation Rat	772600 mg/m ³ (Exposure time: 4 h)
LC50 Inhalation Rat	72.5 mg/l/4h
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)	
LD50 Oral Rat	2220 mg/kg
LD50 Dermal Rat	>740 mg/kg highest tested dose level
LD50 Dermal Rabbit	>2325 mg/kg highest tested dose level
LD50 Inhalation Rat	> 52 mg/l/4h
Sodium xylenesulfonate (1300-72-7)	
LD50 Oral Rat	>5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
Potassium hydroxide (1310-58-3)	
LD50 Oral Rat	284 mg/kg
Phosphoric acid (7664-38-2)	
LD50 Oral Rat	1530 mg/kg
LD50 Dermal Rabbit	2740 mg/kg
LC50 Inhalation Rat	> 850 mg/m ³ (Exposure time: 1 h)
2-Phenylphenol (90-43-7)	
IARC group	3
Isopropyl alcohol (67-63-0)	
IARC group	3

SECTION 12: Ecological Information

12.1 Toxicity

Ecology - General

☹️ Toxic to aquatic life; Toxic to aquatic life with long lasting effects.

2-Phenylphenol (90-43-7)

LC50 Fish 1	3.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas (flow-through))
EC50 Daphnia 1	1 - 2.5 mg/l (Exposure time: 48 h - Species: Daphnia magna (Static))

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

LC 50 Fish 2	2.74 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)
ErC50 (algae)	3.57 mg/l (72h, Selenastrum capricornutum)
NOEC chronic fish	0.036 mg/l
NOEC chronic algae	0.468 mg/l Selenastrum capricornutum
o-Benzyl-p-chlorophenol (120-32-1)	
LC50 Fish 1	0.72 ppm (Oncorhynchus mykiss (Rainbow trout))
EC50 Daphnia 1	0.59 ppm (Daphnia magna (Water flea; 48hr))
Isopropyl alcohol (67-63-0)	
LC50 Fish 1	9640 mg/l (Exposure time: 96 h - Species: Plimephales promelas (flow-through))
EC50 Daphnia 1	13299 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Other Aquatic Organisms 1	1000 mg/l (Exposure time: 96 h - Species: Desmodemus subspicatus)
LC 50 Fish 2	11130 mg/l (Exposure time: 96 h - Species: Plimephales promelas (static))
EC50 Other Aquatic Organisms 2	1000 mg/l (Exposure time: 72 h - Species: Desmodemus subspicatus)
Sulfonic acids, c14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)	
LC50 Fish 1	4.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio (static))
EC50 Daphnia 1	4.53 mg/l (Ceriodanphnia sp)
LC 50 Fish 2	12.2 mg/l (Exposure time: 96 h - Species: Brachydanio rerio (semi-static))
ErC50 (algae)	5.2 mg/l (Water quality - Marine Algal Growth Inhibition Test with Skeletonema costatum and Phaeodactylum tricornutum)
Sodium xylene sulfonate (1300-72-7)	
EC50 Daphnia 1	> 1580 ml/l (Exposure time: 48 h - Species: Oncorhynchus mykiss (Flow-through))

12.2. Persistence and Degradability

Birex SE III	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

Birex SE III	
Bioaccumulative Potential	Not established.
2-Phenylphenol (90-43-7)	
Log Pow	3.18
Isopropyl alcohol (67-63-0)	
Log Pow	0.05 (at 25 °C)
Potassium hydroxide (1310-58-3)	
Log Pow	0.65

12.4. Mobility in Soil

No additional information available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

Pesticide 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.

SECTION 14: Transport Information

14.1. In Accordance with DOT

Proper Shipping Name	: DISINFECTANTS, LIQUID, CORROSIVE N.O.S. (2-phenylphenol, o-benzyl-p-chlorophenol)
Hazard Class	: 8
Identification Number	: UN1903
Label Codes	: 8
Packing Group	: III
Limited Quantity	: Yes, when inner containers do not exceed 5 liters.
Marine Pollutant	: Yes, not regulated in ground transport or when inner or single containers do not exceed 5 liters.
ERG Number	: 153

14.2. In Accordance with IMDG

Proper Shipping Name	: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (2-phenylphenol, o-benzyl-p-chlorophenol)
Hazard Class	: 8
Identification Number	: UN1903
Label Codes	: 8



Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Packing Group	: III
Limited Quantity	: Yes, when inner containers do not exceed 5 liters.
Marine Pollutant	: Yes: Refer to IMDG 2.10 for exceptions, and markings and documentation requirements.

14.3 In Accordance with IATA

Proper Shipping Name	: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (2-phenylphenol, o-benzyl-p-chlorophenol)
Hazard Class	: 8
Identification Number	: UN1903
Label Codes	: 8
Packing Group	: III
Limited Quantity	: No
Marine Pollutant	: N/A

14.4 In Accordance with TDG

Proper Shipping Name	: DISINFECTANT, LIQUID, CORROSIVE, N.O.S. (2-phenylphenol, o-benzyl-p-chlorophenol)
Hazard Class	: 8
Identification Number	: UN1903
Label Codes	: 8
Packing Group	: III
Limited Quantity	: Yes, when inner containers do not exceed 5 liters.
Marine Pollutant	: Yes, not regulated in ground transport or when inner or single containers do not exceed 5 liters.

SECTION 15: Regulatory Information

15.1 US Federal Regulations

Birex SE III

EPA FIFRA Pesticide Product Notice	This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.
EPA FIFRA Signal Word	Danger
EPA FIFRA Hazard Statements	Keep out of reach of children.
EPA FIFRA Precautionary Statements	HAZARDOUS TO HUMANS AND DOMESTIC ANIMALS.
	Danger.
	Corrosive.
	Causes irreversible eye damage and skin burns.
	Harmful inhaled.
	Avoid breathing vapor or spray mist.
	Harmful if swallowed.
	Do not get in eyes, on skin or on clothing.
	Wear protective eyewear, gloves, and clothing.
	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 before reuse.

Birex SE III*

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard
-------------------------------------	--

2-Phenylphenol (90-43-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting	1.0 %
---------------------------------------	-------

o-Benzyl-p-chlorophenol (120-32-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Isopropyl alcohol (67-63-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory.

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting	1.0 % (only if manufactured by the strong acid process; no supplier notification)
---------------------------------------	---

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Water (7732-18-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium xylene sulfonate (1300-72-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Potassium hydroxide (1310-58-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

CERCLA RQ	1000 lb
-----------	---------

Phosphoric acid (7664-38-2)

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Listed on the United States TSCA (Toxic Substances Control Act) inventory	
CERCLA RQ	5000 lb

15.2 US State Regulations

2-Phenylphenol (90-43-7) U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
Isopropyl alcohol (67-63-0) U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
Potassium hydroxide (1310-58-3) U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
Phosphoric acid (7664-38-2) U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List

15.3 Canadian Regulations

2-Phenylphenol (90-43-7) Listed on the Canadian DSL (Domestic Substances List)
o-Benzyl-p-chlorophenol (120-32-1) Listed on the Canadian DSL (Domestic Substances List)
Isopropyl alcohol (67-63-0) Listed on the Canadian DSL (Domestic Substances List)
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6) Listed on the Canadian DSL (Domestic Substances List)
Water (7732-18-5) Listed on the Canadian DSL (Domestic Substances List)
Sodium xylene sulfonate (1300-72-7) Listed on the Canadian DSL (Domestic Substances List)
Potassium hydroxide (1310-58-3) Listed on the Canadian DSL (Domestic Substances List)
Phosphoric acid (7664-38-2) Listed on the Canadian DSL (Domestic Substances List)

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all of the information required by HPR.

SECTION 16: Other Information, Including Date Of Preparation Or Last Revision

Revision date	08/07/2020
Other Information	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

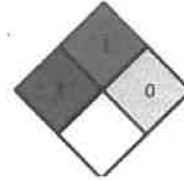
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
HNOC 1	Health Hazards Not Otherwise Classified, Category 1
Met. Corr. 1	Corrosive to metals Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Corr. 1C	Skin corrosion/irritation Category 1C
Skin Irrit. 2	Skin corrosion/irritation Category 2

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

STOT SE 2	Specific target organ toxicity (single exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H290	May be corrosive to metals
H301	Toxic if swallowed
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H373	May cause damage to organs through prolonged or repeated exposure

- NFPA Health Hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.
- NFPA Fire Hazard : 1 - Must be preheated before ignition can occur.
- NFPA Reactivity Hazard : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.