

# SAFETY DATA SHEETS

**This SDS packet was issued with item:**

070473652

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

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# 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: **Opti-Cide-3® Disinfectant Cleaner Solution**  
Catalog Number: **DOCS12-008, DOCS12-024, DOCP04-128, DOCP02-320**  
Distributed by: Biotrol  
13705 Shoreline Court East  
Earth City, MO 63045  
1.800.822.8550

## SECTION II: Health Hazard Information

**Appearance:** Clear liquid with slight alcohol fragrance.

**Routes of entry:**

**Eye contact:** Direct eye contact may cause slight reversible irritation.

**Inhalation:** Lightheadedness and/or irritation to the nose and throat may occur after prolonged, contained exposure.

**Ingestion:** May cause gastric distress.

**Skin Contact:** May produce slight redness or irritation of the skin (unlikely).

**NFPA Hazard Rating:** Health (0); Flammability (0); Reactivity (0)

## SECTION III: Hazardous Components

| Hazardous Ingredient | CAS #   | %     | OSHA PEL | ACGIH TLV            | Limit |
|----------------------|---------|-------|----------|----------------------|-------|
| Isopropanol          | 67-63-0 | 20.85 | 400 ppm  | 980mg/m <sup>3</sup> | N/A   |

## SECTION IV: First Aid Procedures

**Skin:** If irritated, rinse with water. If irritation persists, seek medical attention.

**Eyes:** Flush with clean water for several minutes. If irritation persists, seek medical attention.

**Ingestion:** Drink water or milk to dilute. Induce vomiting. Seek medical attention.

**Inhalation/aspiration of liquid:** Remove to fresh air. Seek medical assistance.

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

|  |   |
|--|---|
| <b>Flash Point</b>                       | 87°F (30.6°C) (Closed cup)  |
| <b>Flammable Limits</b>                  | None  |
| <b>Extinguishing media</b>               | Alcohol foam, CO <sub>2</sub> , dry chemical                                |
| <b>Special fire-fighting procedures</b>  | Follow NIOSH guidelines for alcohol fires (see below)                       |
| <b>Unusual fire or explosion hazards</b> | As with all products containing alcohol, the vapors may be heavier than air |

Refer to section 14 for specific storage, handling and transportation exemption per Code of US Federal Regulations as an "Aqueous/alcohol" solution

### **NIOSH guidelines for isopropyl alcohol fires:**

Fires involving isopropyl alcohol should be fought upwind from the maximum distance possible. Keep unnecessary people away; isolate the hazard area and deny entry. Isolate the area for 1/2 mile in all directions if a tank, rail car, or tank truck is involved in the fire. For a massive fire in a cargo area, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from the area and let the fire burn. Emergency personnel should stay out of low areas and ventilate closed spaces before entering. Vapors may travel to a source of ignition and flash back. Vapors are an explosion and poison hazard indoors, outdoors, or in sewers. Containers of isopropyl alcohol may explode in the heat of the fire and should be moved from the fire area if it is possible to do so safely. If this is not possible, cool fire exposed containers from the sides with water until well after the fire is out. Stay away from the ends of containers. Personnel should withdraw immediately if a rising sound from a venting safety device is heard or if there is discoloration of a container due to fire. Firefighters should wear a full set of protective clothing and self-contained breathing apparatus when fighting fires involving isopropyl alcohol.

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

In case of spill: Absorb with absorbent material and place into container for disposal. Rinse with plain water.

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

Keep out of reach of children. Do not store near heat or open flame. Keep container closed when not in use.

## **SECTION VIII: Personal Protection**

**Respiratory Protection:** N/A

**Local Exhaust:** N/A

**Mechanical:** Usual

**Protective Gloves and/or Clothing:** N/A

**Eye Protection:** Avoid direct contact with eyes. Safety glasses are recommended.

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

|  |                                      |
|--|--------------------------------------|
| <b>Boiling Point</b>                           | 188°F (86.7°C)                       |
| <b>Freezing Point</b>                          | 14°F (-10°C)                         |
| <b>Specific Gravity (H<sub>2</sub>O = 1.0)</b> | 0.95 – 0.97                          |
| <b>Vapor Pressure (mmHg)</b>                   | 0.2 – 4.7                            |
| <b>Vapor Density (Air = 1)</b>                 | +1                                   |
| <b>Evaporation Rate</b>                        | Similar to water                     |
| <b>Solubility in Water</b>                     | Complete                             |
| <b>pH</b>                                      | 7.5                                  |
| <b>Appearance and Odor</b>                     | Slight alcohol odor. Clear in color. |

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

**Solution:** Stable

**Conditions to Avoid:** Extreme heat or open flame

**Incompatibility:** Concentrated acids

**Hazardous Polymerization:** Will not occur

**Hazardous Decomposition or By-Products:** Oxides of carbon upon combustion.

## **SECTION XI: Toxicological Information**

Carcinogenicity NT: No

LARC Monographs: No

## **SECTION XII: Ecological Information**

N/A

## **SECTION XIII: Disposal Considerations**

Dispose of in accordance with all federal, state, and local regulations.

## **SECTION XIV: Transport Information**

**DOT (49 CFR 173.150e) exemption applies:** *“Alcohol containing solutions containing 24% or less alcohol by volume and which consist of no less than 50% water are exempt from the classification as flammable and require no special ground shipping, storage, or handling.”*

## **SECTION XV: Regulatory Information**

All ingredients in this product are listed or excluded from the listing on the US Toxic Substances Act (TSCA) Chemical Substance Inventory.

## **SECTION XVI: Other Information**

N/A

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The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, Biotrol makes no recommendation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for particular purpose.

NO REPRESENTATIONS, OR WARRANTIES, EITHER EXPRESSED OR IMPLIED OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR TO THE PRODUCT TO WHICH THE INFORMATION REFERS.

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## SAFETY DATA SHEET

### SECTION 1 – IDENTIFICATION

#### Product Identifier

**Product Name:** Opti-Cide<sup>3</sup>®

**Product Code:** DOCS12-024, DOCP02-320, DOCP04-128, DOCS12-008

#### Recommended Use of the Chemical and Restrictions for Use

**Recommended Use:** Cleaner, Disinfectant, Deodorizer

**Restrictions for Use:** Use only as directed.

#### Details of the Supplier

**Manufactured for:** Biotrol  
13705 Shoreline Court East  
Earth City, MO 63045  
1-800-822-8550

#### Emergency Phone Number

**24-Hour Number:** 1-800-424-9300

**International:** 1-703-527-3887

### SECTION 2 – HAZARDS IDENTIFICATION

#### Classification

| Hazard Class                                     | Category |
|--|----------|
| Flammable liquid                                 | 3        |
| Eye irritation                                   | 2A       |
| Specific target organ toxicity (single exposure) | 3        |

#### Label Elements

##### Hazard Symbols(s):



**Signal Word(s):** Warning

**Hazard Statement(s):** Flammable liquid and vapor. Causes serious eye irritation. May cause drowsiness or dizziness.

**Precautionary Statement(s):** Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/eye protection/face protection. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. Store in a well-ventilated place. Keep cool. Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.

#### Other Hazards

1% of the mixture consists of ingredient(s) of unknown acute toxicity.

### SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name     | CAS Number | Wt %  |
|-------------------|------------|-------|
| Isopropyl alcohol | 67-63-0    | 10-30 |
| 2-Butoxyethanol   | 111-76-2   | 1-5   |

The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

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## SECTION 4 – FIRST AID MEASURES

### First Aid Measures

**Inhalation:** If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor/physician if you feel unwell.

**Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. If irritation persists, get medical attention.

**Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

**Skin:** In case of contact, immediately flush skin with plenty of water. Remove contaminate clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

### Most Important Symptoms and Effects (Acute and Delayed)

**Inhalation:** Vapors may cause drowsiness and dizziness. May cause respiratory tract irritation.

**Eye Contact:** Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

**Skin:** May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

### Indication of any Immediate Medical Attention and Special Treatment Needed

**Note to Physician:** Treat symptomatically.

## SECTION 5 – FIRE FIGHTING MEASURES

### Extinguishing Media

**Suitable:** Water fog, carbon dioxide, dry chemical or alcohol foam.

**Unsuitable:** None known.

### Specific Hazards Arising from Chemical

Products of combustion include but are not limited to: oxides of carbon.

### Protective Equipment and Precautions for Firefighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

**Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

**Environmental Precautions:** See Section 12 for ecological information.

### Methods and Material for Containment and Cleaning Up

Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Scoop up material and place in a disposal container. Provide ventilation.

## SECTION 7 – HANDLING AND STORAGE

### Precautions for Safe Handling

**Handling:** Keep away from sources of ignition. No smoking. Take precautionary measures against static discharge. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only non-sparking tools. Use only outdoors or in well-ventilated area.

**General Hygiene Advice:** Launder contaminated clothing before use. Wash hands before eating, drinking, or smoking.

### Conditions for Safe Storage, Including any Incompatibilities

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**Storage Conditions:** Proper grounding procedures to avoid static electricity should be followed. Keep locked up and out of the reach of children. Keep container tightly closed and in a well-ventilated place. Keep cool.

**Incompatible Materials:** Oxidizers.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

#### Exposure Guidelines:

| Chemical Name               | ACGIH TLV | OSHA PEL              | NIOSH IDLH    |
|-----------------------------|-----------|-----------------------|---------------|
| Isopropyl alcohol (67-63-0) | 200 ppm   | 980 mg/m <sup>3</sup> | Not available |
| 2-Butoxyethanol (111-76-2)  | 20 ppm    | 240 mg/m <sup>3</sup> | Not available |

### Appropriate Engineering Controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

### Individual Protection Measures

**Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Skin and Body Protection:** Wear suitable protective clothing.

**Eye/Face Protection:** Wear approved eye protection (properly fitted dust- or splash-proof chemical safety goggles) and face protection (face shield).

**General Work/Hygienic Practices:** Handle in accordance with good industrial hygiene and safety practice. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Colorless liquid

**Odor:** Alcohol-like

**Odor threshold:** Not determined

**pH:** 7.6

**Melting point/freezing point:** Not determined

**Initial boiling point and boiling range:** Not determined

**Flash point:** 30°C (86°F) TCC

**Evaporation rate:** Not determined

**Flammability (solid, gas):** Flammable

**Upper/lower flammability or explosive limits:** Not determined

**Vapor pressure:** Not determined

**Vapor density:** Not determined

**Relative density:** 0.97

**Solubility(ies):** Not determined

**Partition coefficient (n-octanol/water):** Not determined

**Auto-ignition temperature:** Not determined

**Decomposition temperature:** Not determined

**Viscosity:** Not determined

## SECTION 10 – STABILITY AND REACTIVITY

**Reactivity:** Not reactive under normal conditions.

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**Chemical stability:** Stable under recommended storage conditions. May form flammable/explosive vapor-air mixture.

**Possibility of hazardous reactions:** None under normal use.

**Conditions to avoid:** Heat. Incompatible materials. Sources of ignition.

**Incompatible materials:** Oxidizers.

**Hazardous decomposition products:** May include and are not limited to: oxides of carbon.

## SECTION 11 - TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects

**Likely Routes of Exposure:** Inhalation, skin contact, eye contact, ingestion

### Information Related to Physical, Chemical, and Toxicological Effects

See section 4 of this SDS.

### Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

**Carcinogenicity:** NTP: No IARC: No OSHA: No

### Numerical Measures of Toxicity

| Product          |                     |
|------------------|---------------------|
| ATE (oral)       | >2000 mg/kg, rat    |
| ATE (dermal)     | >2000 mg/kg, rabbit |
| ATE (inhalation) | >20 mg/l/4h         |

### **Component Information:**

| Chemical Name               | Oral LD50        | Dermal LD50       | Inhalation LC50    |
|-----------------------------|------------------|-------------------|--------------------|
| Isopropyl alcohol (67-63-0) | 4396 mg/kg (rat) | 12800 mg/kg (rat) | 72.6 mg/l/4h (rat) |
| 2-Butoxyethanol (111-76-2)  | 470 mg/kg (rat)  | Not available     | 450 ppm/4h (rat)   |

## SECTION 12 - ECOLOGICAL INFORMATION

**Ecotoxicity:** Not established

**Persistence and degradability:** Not established

**Bioaccumulative potential:** Not established

**Mobility in soil:** No additional information available

**Other adverse effects:** No additional information available.

## SECTION 13 – DISPOSAL CONSIDERATIONS

See section 8 of this SDS for exposure controls and personal protection.

Dispose of the product and container in accordance with all applicable local, state, and federal regulations. The generation of waste should be avoided or minimized whenever possible. Handle empty containers with care because residual vapors are flammable.

## SECTION 14 – TRANSPORT INFORMATION

**Note:** Classification changes based on quantity, packaging, and method of shipment.

UN1987, Alcohols, n.o.s. (Isopropanol), 3, PG III

### **DOT (Ground):**

Inner or Single Packages ≤ 5L – Limited Quantity

Inner or Single Packages > 5L – Regulated

**IATA (Air):** TBD - Based on Product Size & Packaging

**IMDG (Vessel):** Regulated (Greater than 5 liters otherwise limited quantity)

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## SECTION 15 – REGULATORY INFORMATION

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

### CAUTION

Harmful if inhaled or absorbed through skin.

Causes moderate eye irritation.

Avoid breathing vapors, and contact with eyes, skin, or clothing.

Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

Remove contaminated clothing and wash clothing before reuse.

Do not use or store near heat or open flame.

All ingredients in this product are listed or are excluded from listing on the US Toxic Substances Act (TSCA) Chemical Substance Inventory.

### SARA 313

This product contains chemicals which are subject to the reporting requirements of the Superfund Amendments and Reauthorization Act and Title 40 of the Code of Federal Regulations, Part 372. Chemicals: Isopropanol and Butoxyethanol.

## SECTION 16 – OTHER INFORMATION

**Supersedes:** 24 February 2015

**Date Revised:** 19 February 2016

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designed and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**