

**MATERIAL SAFETY DATA SHEET  
(MSDS) Updated: March 2005**

## Opti-Cide<sup>3</sup> Disinfectant and Cleaner Solution

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### 1 – Identification

Micro-Scientific Industries, Incorporated

1225 Carnegie Street –104B

Rolling Meadows, IL 60008 USA

(General Number) 1-888-253-2536

24 Hour Emergency Number – United States, Canada, Puerto Rico, U.S Virgin Islands

**1-800-255-3924**

International Calls: (813) 977-3668

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### 2 – Composition

Hazardous Ingredients:	OSHA PEL	ACGIH TLV	LIMIT	%
Isopropanol - CAS # 67-63-0	400 ppm	980mg/m3	N/A	21.0

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### 3 - Physical and Chemical Properties

**Boiling Point:** 87°C **Specific Gravity** (H2O=1.0) : 0.95 to 0.97

**Vapor Pressure (mm Hg)** : 0.2-4.7 **Vapor Density** (Air = 1) : +1

**Evaporation Rate** : Similar to water **Solubility in Water** : Complete

**Freezing point** : -10C **Appearance and Odor** :Slight alcohol fragrance. Clear in color.

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### 4 - Fire and Explosion Hazard Data

**Flash Point** : 87 degrees F. Closed cup **Flammable Limits** : None

**Extinguishing Media** : Alcohol foam, CO2, dry chemical **Special Fire Fighting**

**Procedures** : NIOSH for alcohol fires **Unusual fire or explosion hazards** : Vapors may be heavier than air. Keep away from open flame.

**Refer to section 10 for specific storage, handling and transportation exemption per Code of Federal Regulations as an "Aqueous" solution**

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### 5 – Reactivity Data

**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.

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### 6 - Health Hazard Data

**Routes of Entry:** **Eyes** : May cause some slight reversible eye irritation with direct contact. **Inhalation** : Prolonged, contained exposure to alcohol vapors may cause light-headedness and /or irritation to nose and throat **Gastric:** May cause some gastric distress **Skin:** May produce some slight redness or irritation although unlikely

**Carcinogenicity :** **NTP** : No **LARC Monographs** : No  
**OSHA 29 CFR 1910 Regulated** : No

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### 7 - Emergency First Aid Procedures

**Skin** : If irritated, flush with water. If irritation persists, seek medical attention.  
**Eyes:** Flush with water. If irritation persists, seek medical attention. **Ingestion:** Seek medical attention. Drink water or milk. Induce vomiting.  
**Inhalation of liquid:** Remove to fresh air. Seek medical assistance.

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### 8 - Precautions for Safe Handling and Use

**Spilled material** : Flush to sanitary sewer system using plain water.  
**Waste Disposal Method** : Ordinary waste system

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### 9 – Control Measures

**Respiratory Protection:** N/A **Local Exhaust** : N/A **Mechanical** : Usual  
**Protective Gloves and/or clothing:** : N/A **Eye Protection:** Avoid direct contact with eyes.

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**10 – Transportation and Storage : Department of Transportation (49 CFR 173.150e) transport and handling exemption applies.** “Alcohol containing solutions containing 24 percent or less alcohol by volume and which consists of no less than 50 percent water are exempt from the classification as flammable”. Not regulated for ground transport & handling except in bulk quantities of 750 gallons or greater.

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