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## SAFETY DATA SHEET - 29 CFR 1910.1200

### Section 1: Company and Product Identification

**Product Name:** Bio-1504™ (4% Denatured Alcohol Solution)

**Product Code:** T1504

**Company:** Biologos, LLC  
2235 Cornell Ave  
Montgomery, IL 60538  
PH: 800-246-4088

**Emergency INFOTRAC  
Response:** (800) 535-5053

### Section 2: Hazards Identification

GHS02

GHS07

GHS08

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**Hazard Pictograms:**



**Signal Word:** Danger

**Hazard Category:** Serious eye damage/eye irritation Cat 2  
Specific target organ tox, single exp. Cat 3 (narcotic effects)  
Flammable Liq Cat 2  
Specific target organ tox, single exp. Cat 3 (resp irrit)

**Hazard Statements:** H319: Causes serious eye irritation  
H336: May cause drowsiness or dizziness  
H226: Flammable liquid and vapour  
H315: Causes skin irritation  
H361: Suspected of damaging fertility or the unborn child  
H370: Causes damage to organs

**Precautionary Statements:** Prev: P261: Avoid breathing dust/fume/gas/mist/vapours/spray  
P241: Use explosion-proof electrical/ventilating/light/.../equipment  
P271: Use only outdoors or in a well-ventilated area  
P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking  
P233: Keep container tightly closed  
P240: Ground/bond container and receiving equipment  
P242: Use only non-sparking tools  
P243: Take precautionary measures against static discharge  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P264: Wash thoroughly after handling  
Resp: P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove  
P337+313: If eye irritation persists get medical advice/attention  
Storage: P403+235: Store in a well ventilated place. Keep cool

**Hazards not otherwise classified:** Not applicable, none known.

### Section 3: Composition / Information on Ingredients

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Hazardous substance (name)	Hazard Category	CAS#	Weight %
Ethyl Alcohol	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H335	64-17-5	3.4 - 3.8
Water	Not Classified	7732-18-5	95 - 96
Iso-propyl Alcohol	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336	67-63-0	0.12 - 0.24
Methanol	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336	67-56-1	0.12 - 0.24

### Section 4: First Aid Measures

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**General Info:** Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with labored breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

**Notable Exposure symptoms:** Dry skin and irritation of eye tissue.

**If ingested:** Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Give activated charcoal. Call Poison Information Centre. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital. Doctor: gastric lavage.

**If inhaled:** Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

**Eye contact:** Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

**Skin contact:** Rinse with water. Soap may be used. Do not apply (chemical) neutralizing agents. Take victim to a doctor if irritation persists.

**Additional Info:** ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Red skin. Dry skin. Itching. Cracking of the skin. Skin rash/inflammation. Impaired memory.

### Section 5: Fire Fighting Measures

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**General Info:** DIRECT FIRE HAZARD. Highly flammable. Gas/vapor flammable with air within explosion limits. INDIRECT FIRE HAZARD. May be ignited by sparks. Gas/vapor spreads at floor level: ignition hazard.

**Extinguishing Method / Equipment:** Water spray. Polyvalent foam. Alcohol-resistant foam. BC powder. Carbon dioxide.

**Hazardous Decomposition Info:** Upon combustion: CO and CO<sub>2</sub> are formed. Violent to explosive reaction with (strong) oxidizers. Prolonged storage/in large quantities: may form peroxides.

## Section 6: Accidental Release Measures

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**Personal precautions, protective equipment and procedures:** Ensure adequate ventilation. Use personal protective equipment. Evacuate personnel to safe areas. Refer to Section 8 Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material.

**Containment Equipment and Procedures:** Prevent further leakage or spillage if safe to do so. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Stop spill from entering drains, sewers, streams, or waterways.

**Cleanup Procedures:** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

## Section 7: Handling and Storage

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**Safe Handling Precautions:** Handle in accordance with good industrial hygiene and safety practice. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors or mists. Keep away from heat, sparks and open flame. No smoking.

**Recommendations for Storage:** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations.

**Incompatibilities:** Strong oxidizing agents. Acids. Chlorinated compounds.

## Section 8: Exposure Control / Personal Protection

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**General / Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Provide adequate general and local exhaust ventilation.

**Work Clothing:** Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves. Antistatic boots

**Eye/face protection:** Tightly fitting safety goggles.

**Skin Protection:** Wear protective gloves/clothing. Long sleeved clothing. Chemical resistant apron. Impervious gloves. Antistatic boots

**Respiratory Protection:** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**Additional Information:** Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Wash hands before breaks and immediately after handling the product.

Substances with Exposure Limits	CAS#	ACGIH-TLV	OSHA-PEL
Ethyl Alcohol	64-17-5	STEL: 1000 ppm	TWA: 1000 ppm
Iso-propyl Alcohol	67-63-0	STEL & TWA: 200 ppm	TWA: 200 ppm

Methanol	67-56-1	STEL & TWA: 200 ppm	TWA: 200 ppm
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### Section 9: Physical and Chemical Properties

<b>State:</b> Liquid	<b>Melting Point:</b> Not avail	<b>Freezing Point:</b> Not avail	<b>Odor Threshold:</b> Not Avail
<b>Color:</b> Clear	<b>Boiling Point/Range:</b> Not avail	<b>pH:</b> Not avail	
<b>Sp Grav:</b> Not avail	<b>Odor:</b> Alcohol	<b>Water Solubility:</b> Soluble	
<b>Evaporation rate:</b> Not avail	<b>Flash Point °F:</b> Not avail	<b>Part. Coeff (n-octanol/water):</b> Not avail	
<b>Upper Flam Limits:</b> Not avail	<b>Lower Flam Limits:</b> 3.3%	<b>Vapor Pressure:</b> Not avail	
<b>VOC Content (lbs/gal):</b> 100%	<b>Viscosity:</b> Not avail	<b>Autoignition Temp:</b> Not avail	

### Section 10: Stability and Reactivity

**General:** Upon combustion: CO and CO<sub>2</sub> are formed. Reacts violently with many compounds e.g., with strong oxidizers, violet to explosive reaction with some acids.

**Incompatible materials:** Strong Acids. String Bases.

**Decomposition products:** Carbon monoxide. Carbon dioxide.

### Section 11: Toxicological Information

**Toxicological Information:** Inhalation: Vapors can cause irritation of respiratory tract. High concentrations can cause headache, nausea, lightheadedness and central nervous system depression.

**(product):** Eye Contact: May cause serious eye contamination, including stinging, tearing, redness and swelling. Skin Contact: Dry skin. Itching. Cracking of the skin. Ingestion: May cause liver and kidney damage. May cause vomiting, diarrhea and pain.

**Likely Routes of Exposure:** Ingestion; Inhalation; Skin and eye contact

#### Toxicological Information (contained substances)

Hazardous substance (name)	LD50 Oral	LD50 Dermal	LC50 Inh	Irritancy:
Ethyl Alcohol	>10740 mg/kg (Rat)	>16000 mg/kg (Rabbit)	Not Available	Not classified
Isopropyl Alcohol	5045 mg/kg (Rat)	12870 mg/kg (rabbit)	73 mg/l/4h (Rat)	Not classified
Methanol	>5000 mg/kg (Rat)	15800 mg/kg (Rabbit)	85 mg/l/4h (Rat)	Not classified

**Carcinogenicity:** Ethanol is an IARC Class 1 carcinogen.

**Mutagenicity:** Not Classified  
**Sensitization:** Not Classified  
**Reproductive or Developmental Effects:** Not Classified

## Section 12: Ecological Information

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**General information:** Classification concerning the environment: not applicable.

**Degradation / Mobility info:** Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No test data on mobility of the substance available.

**Bioaccumulative potential:** Low potential for bioaccumulation (Log Kow < 4).

**Aquatic Toxicity:** EC50 Daphnia 1 > 10000 mg/l (48 h; Daphnia magna; Lethal)

## Section 13: Disposal Information

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**Product disposal:** Dispose of product in accordance with local, regional, and national regulations. Consult with waste contractor.

**Container disposal:** Treat empty containers with extra care, as residual material may be flammable. Consult waste contractor.

**Other considerations:** None

## Section 14: Transport Information

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**DOT:** UN1987 Alcohols, n.o.s. (ethanol, methanol) 3, III

**IMO/IMDG:** UN-No. 1170, Flammable Liquids

**IATA:** UN-No. 1170, Flammable Liquids, Packing Group II

**OTHER:** Inquire for further transport information.

## Section 15: Regulatory Information

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**TSCA:** Listed

**CERCLA RQ:** Methanol - RQ 5,000 lb

**SARA 311/312:** Acute Hazard, Fire Hazard

**SARA 313** Listed

**California Prop 65**  
**Substances:** Methanol

**USDOT RQ - No.** DOT Marine Pollutant - No.

**Clean Water Act** Not listed.

## Section 16: Other Information

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**SDS Author:** Biologos, LLC

**Version Date:** 10/2/2019

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