

**Material Safety Data Sheet**

**E. histolytica / dispar ELISA Kit**

SECTION 1: IDENTIFICATION OF THE PREPARATION AND COMPANY NAME.

**Supplier:** Diagnostic Automation / Cortez Diagnostics Inc.  
 21250 Califa Street, Suite 102 and 116,  
 Woodland hills, CA 91367 USA

**Product Name:** E. histolytica / dispar ELISA Kit  
**Catalog No:** 8307-3  
**Synonyms:** N/A  
**Intended Use:** Laboratory Use

SECTION 2: Hazards identification

**Emergency Overview:** Appearance: Seven different liquids. **Warning!** Stop Solution is a mildly corrosive liquid. All liquids may be irritating to eyes, skin, digestive tract or respiratory tract. For Research use only.

<b>HMIS HEALTH</b>	<b>1</b>
<b>HMIS FLAMM ABILITY</b>	<b>0</b>
<b>HMIS REACTIVITY</b>	<b>0</b>
<b>PERSONAL PROTECTION</b>	<b>C</b>

**Regulatory Status:** Is not considered hazardous under the OSHA standard or WHMIS.

**Potential Health Effects:**

**Inhalation:** Inhalation of liquid or mist may be irritating to the respiratory tract.

**Ingestion:** May cause irritation of the digestive tract. Stop Solution may cause burns to the digestive tract.

**Skin Contact:** May cause skin irritation. Stop Solution may cause burns.

**Eye Contact:** May cause eye irritation. Stop Solution may cause burns.

**Chronic Exposure:** Repeated or prolonged exposure may cause allergic reactions in sensitive individuals.

**Aggravation of Pre-existing Conditions:** No information available.

**Target Organs:** No information available.

SECTION 3: Composition/information on ingredients

<b>Kit Component</b>	<b>Contains</b>	<b>CAS #</b>	<b>EINECS #</b>	<b>Weight %</b>
Reagent 1	Thimerosal	54-64-8	200-210-4	0.5%
Reagent 2	Thimerosal	54-64-8	200-210-4	0.5%
Positive Control	Thimerosal	54-64-8	200-210-4	0.2%
Negative Control	Thimerosal	54-64-8	200-210-4	0.2%
Chromogen	Tetramethylbenzidine	54827-17-7	259-364-6	<1%
Wash Concentrate	Thimerosal	54-64-8	200-210-4	0.4%
Stop Solution	Phosphoric Acid	7664-38-2	231-633-2	5%

Non-hazardous components may or may not be listed. Carcinogens are listed when present at 0.1% or more; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or more. This is not intended to be complete compositional disclosure. See Section 15 for applicable states right to know and other regulatory information.

SECTION 4: First 4.1. Description of first aid measures

Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if necessary.
Ingestion	Drink several glasses of water or milk. Never give anything by mouth to an unconscious person. Do not induce vomiting. Get medical attention if necessary.
Skin contact	Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
Eyes	Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if necessary.

Note to Physicians: N/A

**SECTION 5: Firefighting measures**

Extinguishing media	
	Use appropriate media for the surrounding fire.
Fire	
	Flash point : Not flammable.
Explosion	
	Not considered an explosion hazard.
Special Precautions	
	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

**NFPA Rating:** Health – 1 Flammability – 0 Reactivity – 0 Other – NA

**SECTION 6: Accidental release measures**

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Collect liquid or solid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Wash contaminated area with plenty of water.

**SECTION 7: Handling and storage**

Keep all containers tightly closed. Store at 2-8°C. Protect material from long-term exposure to light. Short periods of exposure to light are acceptable.

**SECTION 8: Exposure controls/personal protection**

Compound	CAS#	OSHA PEL	ACGIH TLV	NIOSH TLV
Thimerosal	54-64-8	None Established	0.1mg/m <sup>3</sup> (TWA) (as Hg)	0.05 mg/m <sup>3</sup> (TWA) (vapor except organoalkyls, as Hg)
Tetramethylbenzidine	54827-17-7	None Established	None Established	None Established
Phosphoric acid	7664-38-2	1mg/m <sup>3</sup> (TWA)	1mg/m <sup>3</sup> (TWA) 3 mg/m <sup>3</sup> (STEL)	1mg/m <sup>3</sup> (TWA) 3 mg/m <sup>3</sup> (STEL)

**Personal Protective Equipment:**

**Skin Contact:** Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Latex and nitrile are suitable glove materials.

**Eye Contact:** Use chemical safety goggles and/or full face shield where misting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

**Inhalation:** Use NIOSH-approved vapor respirator if exposure is unknown or exceeds permissible limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. **WARNING:** Air-purifying respirators do not protect workers in oxygen deficient atmospheres.

**Engineering Controls:** A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

**SECTION 9: Physical and chemical properties**

	Reagent 1	Reagent 2	Positive Control	Negative Control
Appearance	Clear blue liquid	Clear red liquid	Clear colorless liquid	Clear colorless liquid
Melting Point	≈ 0°C	≈ 0°C	≈ 0°C	≈ 0°C
Boiling Point	≥ 100°C	≥ 100°C	≥ 100°C	≥ 100°C
Specific Gravity	About 1.0	About 1.0	About 1.0	About 1.0
pH	About 7.4	About 6.6	About 6.6	About 6.7

Solubility in water	Complete	Complete	Complete	Complete
	<b>Chromogen</b>	<b>Wash Concentrate</b>	<b>Stop Solution</b>	
Appearance	Clear colorless liquid	Clear colorless liquid	Clear colorless liquid	
Melting Point	≈ 0°C	≈ 0°C	≈ 0°C	
Boiling Point	≥ 100°C	≥ 100°C	≥ 100°C	
Specific Gravity	About 1.0	About 1.0	1.0-1.05	
pH	7.2	About 6.5	1.5	
Solubility in water	Complete	Complete	Complete	

**SECTION 10: Stability and reactivity**

**Chemical Stability:** This product is stable in closed containers at room temperature.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>, N<sub>2</sub>O), sulfur oxides (SO<sub>2</sub>, SO<sub>3</sub>), phosphorus oxides (P<sub>2</sub>O<sub>5</sub>), hydrogen chloride. **Incompatibilities:** Strong oxidizers, heat, strong acids or bases.

**Conditions to Avoid:** Incompatible materials, combustible materials.

**SECTION 11: Toxicological information**

**Acute Dose Effects:** Eye: Phosphoric acid: Draize Rabbit: 119 mg Severe

**Skin:** Phosphoric acid: Rat LD50: 2740 mg/

**Ingestion:** Phosphoric acid: Rat LD50: 1530 mg/kg

**Inhalation:** Rat LC50: >850 mg/m<sup>3</sup>/1H

**Carcinogenicity:** Not listed by OSHA, NTP or IARC.

**SECTION 12: Ecological information**

**Environmental Fate:** This product is not expected to bioaccumulate. When released into water or air its expected halflife is 1- 10 days.

**Ecotoxicity:** Dilute nature and small volumes of products makes any ecological effect highly unlikely.

**SECTION 13: Disposal considerations**

**As a waste, this material in its raw form IS NOT considered a HAZARDOUS WASTE under RCRA (29 CFR 261).**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

**SECTION 14: Transport information**

All the solutions are unregulated by DOT and IATA.

**SECTION 15: Regulatory information**

**TSCA Chemical Inventory:** All of the chemicals in this product are listed on the TSCA Inventory.

**TSCA Sec 4 Chemical Test Rule:** None of the chemicals in this product are under a Chemical Test Rule.

**TSCA Sec 8(d):** None of the chemicals in this product are on the Health and Safety Reporting List.

**TSCA Sec 12(b) Notices of Export:** None of the chemicals in this product are on this list.

**TSCA Significant New Use Rule (SNUR):** None of the chemicals in this product are on this list.

**SARA Sec 302 (EHS) TPQ:** None of the chemicals in this product have a TPQ.

**SARA Sec 302 (EHS) RQ:** None of the chemicals in this product have a RQ.

**SARA Sec 311/312:** Acute – Phosphoric acid; Chronic – NO; Fire – NO; Release of Pressure – NO;

Reactivity – NO

**SARA 313 List:** No materials in this product are reportable under Section 313 Title III and 40 CFR Part 3 7 2

**CERCLA Hazardous Substances and corresponding RQs:** Phosphoric acid, 5000 lbs.

**RCRA:** None of the chemicals in this product are on this list.

**Clean Air Act: Hazardous Air Pollutants? NO Class 1 Ozone Depletors? NO Class 2 Ozone**

**Depletors?** NO

**Clean Water Act: Hazardous Substance?** Phosphoric acid **Priority Pollutant?** NO **Toxic Pollutant?**

NO

**Chemical Weapons Convention:** None of the chemicals in this product are on this list.

**Drug Enforcement Agency (DEA) CDTA:** None of the chemicals in this product are on this list.

**OSHA:** None of the chemicals in this product are considered Highly Hazardous by OSHA.

**State Right-to-Know Lists:** Phosphoric acid is found on the Right-to-Know lists of California, Florida

New Jersey, Pennsylvania, Massachusetts or Minnesota.

**California Proposition 65:** This product contains Thimerosal, a chemical known to the state to cause cancer or reproductive toxicity. A person in the course of doing business must warn others who may consume, come into contact with, or otherwise be exposed to this chemical.

**Canadian DSL/NDSL Status:** As an *in vitro* diagnostic product, this product is regulated by Health Canada (Medical Devices Regulations, SOR/98-282).

**European Union**

**Hazard Symbols:** C

**Risk Phrases:** R36/38- Irritating to eyes and skin.

R25- Toxic if swallowed.

R26- Very toxic by inhalation.

R34- Causes burns.

**Safety Phrases:** S1/2- Keep locked up and out of the reach of children.

S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.




S28- After contact with skin, wash immediately with plenty of water.

S36/37- Wear suitable protective clothing and gloves.

S39- Wear eye/face protection.

S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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<p><b>ISO 13485</b> <b>ISO 9001</b></p> 	
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