

## **MSDS: Histamine EIA Kit for Food and Beverage Product No. FS35**

This EIA Kit, is provided and produced by Oxford Biomedical Research as a test for food quality.

### Manufacturer:

Oxford Biomedical Research  
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Rochester Hills, MI 48309  
(248) 852-8815

### Section 1 - Hazardous Components:

Component: EIA Buffer	Hazardous Content: None
Extraction Buffer	None
HRP Conjugate	None
Standard	None
TMB Substrate	Substrate Ingredient 1
Wash Buffer	None

### Section 2 - Physical and Chemical Characteristics:

#### **EIA Buffer:**

Boiling Point: ~100°C  
Vapor Pressure: Not Determined  
Vapor Density: Not Determined  
Solubility in Water: Soluble

Specific Gravity: Not Determined  
Melting Point: N/A  
Evaporation Rate: Not Determined  
Appearance: Clear Liquid

#### **Extraction Buffer:**

Boiling Point: ~100°C  
Vapor Pressure: Not Determined  
Vapor Density: Not Determined  
Solubility in Water: Soluble

Specific Gravity: Not Determined  
Melting Point: N/A  
Evaporation Rate: Not Determined  
Appearance: Clear Liquid

**HRP Conjugate:**

Boiling Point: ~100°C  
Vapor Pressure: Not Determined  
Vapor Density: Not Determined  
Solubility in Water: Soluble

Specific Gravity: Not Determined  
Melting Point: N/A  
Evaporation Rate: Not Determined  
Appearance: Clear Liquid

**Standard:**

Boiling Point: ~100°C  
Vapor Pressure: Not Determined  
Vapor Density: Not Determined  
Solubility in Water: Soluble

Specific Gravity: Not Determined  
Melting Point: N/A  
Evaporation Rate: Not Determined  
Appearance: Clear Liquid

**TMB Substrate:**

Boiling Point: 81°C  
Vapor Pressure: 0.29 mm Hg @ 20°C  
Vapor Density: 3.4 (Air = 1)  
Solubility in Water: Soluble

Specific Gravity: 1.033 (H<sub>2</sub>O = 1)  
Melting Point: N/A  
Evaporation Rate: Not Determined  
Appearance: Clear Liquid

**Wash Buffer:**

Boiling Point: ~100°C  
Vapor Pressure: Not Determined  
Vapor Density: Not Determined  
Solubility in Water: Soluble

Specific Gravity: Not Determined  
Melting Point: N/A  
Evaporation Rate: Not Determined  
Appearance: Clear Liquid

**Section 3 - Fire and Explosion Hazard Data:****EIA Buffer:**

Flash Point: Not Determined  
Special Fire Fighting Measures: None  
Unusual Fire and Explosion Hazards: Carbon monoxide may be produced upon heating.  
Auto-Ignition Temperature: Not Determined  
Explosion Limits: Upper: Not Determined Lower: Not Determined

**Extraction Buffer:**

Flash Point: Not Determined  
Special Fire Fighting Measures: None  
Unusual Fire and Explosion Hazards: Carbon monoxide may be produced upon heating.  
Auto-Ignition Temperature: Not Determined  
Explosion Limits: Upper: Not Determined Lower: Not Determined

**HRP Conjugate:**

Flash Point: Not Determined  
Special Fire Fighting Measures: Dry Chemical, CO<sub>2</sub>, Water Spray  
Unusual Fire and Explosion Hazards: Carbon monoxide may be produced upon heating.  
Auto-Ignition Temperature: Not Determined

Explosion Limits: Upper: Not Determined Lower: Not Determined

**Standard:**

Flash Point: Not Determined

Special Fire Fighting Measures: Dry Chemical, CO<sub>2</sub>, Water Spray

Unusual Fire and Explosion Hazards: Carbon monoxide may be produced upon heating.

Auto-Ignition Temperature: Not Determined

Explosion Limits: Upper: Not Determined Lower: Not Determined

**TMB (3,3',5,5'-tetramethylbenzidine) Substrate:**

Flash Point: 103.9°C (187°F)

Special Fire Fighting Measures: Dry Chemical, CO<sub>2</sub>, Water Spray

Unusual Fire and Explosion Hazards: Carbon monoxide and nitrogen oxides may be produced upon heating.

Auto-Ignition Temperature: Not Determined

Explosion Limits: Upper: 9.5% Lower: 1.3%

**Wash Buffer:**

Flash Point: Not Determined

Special Fire Fighting Measures: Dry Chemical, CO<sub>2</sub>, Water Spray

Unusual Fire and Explosion Hazards: Carbon monoxide and nitrogen oxides may be produced upon heating.

Auto-Ignition Temperature: Not Determined

Explosion Limits: Upper: Not Determined Lower: Not Determined

**Section 4 – Reactivity Hazard Data:**

**EIA Buffer:**

Stability: Stable

Conditions to Avoid: N/A

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition/Byproducts: Carbon monoxide or carbon dioxide may be produced upon heating.

Material Incompatibility: Strong Oxidizing Agents

**Extraction Buffer:**

Stability: Stable

Conditions to Avoid: N/A

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition/Byproducts: Carbon monoxide or carbon dioxide may be produced upon heating.

Material Incompatibility: Strong Oxidizing Agents

**HRP Conjugate:**

Stability: Stable

Conditions to Avoid: N/A

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition/Byproducts: Carbon monoxide or carbon dioxide upon heating.

Material Incompatibility: Strong Oxidizing Agents

**Standard:**

Stability: Stable

Conditions to Avoid: N/A

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition/Byproducts: Carbon monoxide or carbon dioxide may be produced upon heating.

Material Incompatibility: Strong Oxidizing Agents,

**TMB Substrate:**

Stability: Stable

Conditions to Avoid: N/A

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition/Byproducts: Carbon monoxide, carbon dioxide, or nitrogen oxides may be produced upon heating.

Material Incompatibility: Strong Oxidizing Agents

**Wash Buffer:**

Stability: Stable

Conditions to Avoid: N/A

Hazardous Polymerization: Will Not Occur

Hazardous Decomposition/Byproducts: Carbon monoxide, carbon dioxide, or nitrogen oxides may be produced upon heating.

Material Incompatibility: Strong Oxidizing Agents

Section 5 - Health Hazard Data:

**EIA Buffer:**

Exposure Limits: OSHA PEL: N/A      ACGIH TLV: N/A

Toxicity Data: N/A

Health Hazards: None Known

Chronic Exposure: N/A

Target Organs: None Known

First Aid: Ingestion: Wash out mouth with water if conscious and see immediate medical attention.

Inhalation: Expose to fresh air and seek immediate medical attention. Give oxygen if breathing is difficult.

Skin: Flush area with water for 15 minutes and seek immediate medical attention. Remove contaminated clothing.

Eyes: Flush with water for 15 minutes while lifting eyelids and seek immediate medical attention.

**Extraction Buffer:**

Exposure Limits: OSHA PEL: N/A      ACGIH TLV: N/A  
Toxicity Data: N/A  
Health Hazards: None Known  
Chronic Exposure: N/A  
Target Organs: None Known  
First Aid: Ingestion: Wash out mouth with water if conscious and see immediate medical attention.  
Inhalation: Expose to fresh air and seek immediate medical attention. Give oxygen if breathing is difficult.  
Skin: Flush area with water for 15 minutes and seek immediate medical attention. Remove contaminated clothing.  
Eyes: Flush with water for 15 minutes while lifting eyelids and seek immediate medical attention.

**HRP Conjugate:**

Exposure Limits: OSHA PEL: N/A      ACGIH TLV: N/A  
Toxicity Data: N/A  
Health Hazards: None Known  
Chronic Exposure: N/A  
Target Organs: None Known  
First Aid: Ingestion: Wash out mouth with water if conscious and see immediate medical attention.  
Inhalation: Expose to fresh air and seek immediate medical attention. Give oxygen if breathing is difficult.  
Skin: Flush area with water for 15 minutes and seek immediate medical attention. Remove contaminated clothing.  
Eyes: Flush with water for 15 minutes while lifting eyelids and seek immediate medical attention.

**Standard:**

Exposure Limits: OSHA PEL: N/A      ACGIH TLV: N/A  
Toxicity Data: N/A  
Health Hazards: None Known  
Chronic Exposure: N/A  
Target Organs: None Known  
First Aid: Ingestion: Wash out mouth with water if conscious and see immediate medical attention.  
Inhalation: Expose to fresh air and seek immediate medical attention. Give oxygen if breathing is difficult.  
Skin: Flush area with water for 15 minutes and seek immediate medical attention. Remove contaminated clothing.  
Eyes: Flush with water for 15 minutes while lifting eyelids and seek immediate medical attention.

**TMB Substrate:**

Exposure Limits: OSHA PEL: N/A ACGIH TLV: N/A  
Toxicity Data: N/A  
Health Hazards: Direct contact with eyes, mucus membranes, skin, or respiratory track may cause irritation.  
Chronic Exposure: Overexposure may cause reproductive disorders.  
Target Organs: Eyes, Skin, Reproductive Organs  
First Aid: Ingestion: Wash out mouth with water if conscious and see immediate medical attention.  
Inhalation: Expose to fresh air and seek immediate medical attention. Give oxygen if breathing is difficult.  
Skin: Flush area with water for 15 minutes and seek immediate medical attention. Remove contaminated clothing.  
Eyes: Flush with water for 15 minutes while lifting eyelids and seek immediate medical attention.

**Wash Buffer:**

Exposure Limits: OSHA PEL: N/A ACGIH TLV: N/A  
Toxicity Data: N/A  
Health Hazards: None Known  
Chronic Exposure: N/A  
Target Organs: None Known  
First Aid: Ingestion: Wash out mouth with water if conscious and see immediate medical attention.  
Inhalation: Expose to fresh air and seek immediate medical attention. Give oxygen if breathing is difficult.  
Skin: Flush area with water for 15 minutes and seek immediate medical attention. Remove contaminated clothing.  
Eyes: Flush with water for 15 minutes while lifting eyelids and seek immediate medical attention.

**Section 6 - Control Measures:**

Respiratory Protection: None required with proper ventilation.  
Ventilation: Requires local exhaust.  
Protective Gloves: Proper disposable gloves.  
Eye Protection: Safety glasses or goggles.  
Other Protective Equipment: Uniform, lab coat, or disposable lab wear.  
Work/Hygienic Practices: Follow usual precautionary measures for handling chemicals.  
Keep away from food and beverages.

**Section 7 - Handling and Use Precautions:**

Accidental Release Measures: Wear suitable protective equipment to prevent inhalation, ingestion, or skin and eye contact. Clean up spills with a sponge, mop, or vermiculite.  
Waste Disposal: Disposal shall be in accordance with local, state, or federal guidelines.  
Handling and Storage: 4-8°C

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