MATERIAL SAFETY DATA SHEET



Estradiol EIA Kit Product Number: EA70

Revision Date: 11/13/08

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MSDS: Estradiol EIA Kit Product No. EA70

This EIA Kit, is provided and produced by Oxford Biomedical Research as an in vitro diagnostic test kit for the sole purpose of research use.

Manufacturer:

Oxford Biomedical Research 2165 Avon Industrial Dr. Rochester Hills, MI 48309 (248) 852-8815

Section 1 - Hazardous Components:

Component: Hazardous Content:

EIA Buffer 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 Specific Gravity: Not Determined

Vapor Pressure: Not Determined Melting Point: N/A

Vapor Density: Not Determined Evaporation Rate: Not Determined

Solubility in Water: Soluble Appearance: Clear Liquid

Extraction Buffer:

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

Vapor Density: Not Determined Melting Point: N/A

Evaporation Rate: Not Determined Appearance: Clear Liquid

HRP Conjugate:

Boiling Point: ~100°C Specific Gravity: Not Determined

Vapor Pressure: Not Determined Melting Point: N/A

Vapor Density: Not Determined Evaporation Rate: Not Determined

Solubility in Water: Soluble Appearance: Clear Liquid

Standard:

Boiling Point: ~100°C Specific Gravity: Not Determined

Vapor Pressure: Not Determined Melting Point: N/A

Vapor Density: Not Determined Evaporation Rate: Not Determined

Solubility in Water: Soluble Appearance: Clear Liquid

TMB Substrate:

Boiling Point: 81° C Specific Gravity: $1.033 \text{ (H}_20 = 1)$

Vapor Pressure: 0.29 mm Hg @ 20°C Melting Point: N/A

Vapor Density: 3.4 (Air = 1) Evaporation Rate: Not Determined

Solubility in Water: Soluble Appearance: Clear Liquid

Wash Buffer:

Boiling Point: ~100°C Specific Gravity: Not Determined

Vapor Pressure: Not Determined Melting Point: N/A

Vapor Density: Not Determined Evaporation Rate: Not Determined

Solubility in Water: Soluble 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, CO₂, 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, CO₂, 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 Substrate:

Flash Point: 103.9°C (187°F)

Special Fire Fighting Measures: Dry Chemical, CO₂, 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, CO₂, 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

<u>Section 4 – Reactivity Hazard Data:</u>

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 mouth out with water if conscious and seek

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 if irritation occurs. 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 seek

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 if conscious and seek 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 medical

attention if irritation persists.

Eyes: Flush area 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 seek

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 seek

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 seek

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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