



Salivary Androstenedione Enzyme Immunoassay Kit Contents for Importers Cat#: 1-2902 (Single), 1-2902-5 (5-Pack)

<u>Kit Component Descriptions:</u>	<u>Quantity/Single Kit (x5 in 5-Pack)</u>
1. Assay Diluent: A phosphate buffered solution containing a pH indicator and a non-mercury preservative.	60 mL/Bottle
2. Wash Buffer: A 10X phosphate buffered solution containing detergents and a non-mercury preservative.	100 mL/Bottle
3. TMB Substrate: Tetramethylbenzidine (TMB): A non-toxic ready-to-use solution.	25 mL/Bottle
4. Stop Solution: A 2-molar solution of sulfuric acid.	12.5 mL/Bottle
5. a. Androstenedione Standard: Androstenedione, at a concentration of 2430 pg/mL, in a synthetic saliva matrix with a non-mercury preservative. (value in nmol/L is 8.484).	1 mL/Vial
b. Androstenedione Controls:	
High – Androstenedione, at a concentration of 1000 pg/mL	500 µL/Vial
Low - Androstenedione, at a concentration of 40.5 pg/mL	500 µL/Vial
Both concentrations of Androstenedione are in a phosphate buffered solution with a non-mercury preservative.	
6. Androstenedione Enzyme Conjugate: A solution of Androstenedione labeled with horseradish peroxidase.	40 µL/Vial
7. Anti-Androstenedione Coated Microtitre Plate: A ready-to-use 96 well microtitre plate pre-coated with <i>bound, (not free)</i> antibodies (not sheep antibodies) in a resealable foil pouch.	1 plate



Material Safety Data Sheet

Date Updated: 5-15-08

Section 1 – Product and Company Information

Product Name ANDROSTENEDIONE HIGH CONTROL (1000 pg/mL)
ANDROSTENEDIONE LOW CONTROL (40.5 pg/mL)

Product Numbers Component of Kit(s)#: 1-2902, 1-2902-5/1-2912, 1-2912-5

Company Salimetrics, LLC
Street Address 101 Innovation Boulevard
Suite 302
City, State, Zip, Country State College, PA 16803 USA
Technical Phone 814-234-7748
Fax 814-234-1608

Emergency Phone: 814-234-7748
(8am to 5:30pm, EST; Mon. – Fri.)

Section 2 – Composition/Information on Ingredients

<u>Component(s)</u>	<u>CAS #</u>	<u>*APPROX. %</u>	<u>SARA 313</u>
Water	7732-18-5	90-99 %	N/A
Sodium Chloride	7647-14-5	≤ 1 %	
Other components, non-carcinogenic		< 0.5 %	
4-Androstene-3, 17-dione	63-05-8	< 0.1 %	

*Approx. % as wt/vol

Formula Solution

Section 3 – Hazards Identification

NFPA Rating

Health: 0 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 – First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. If breathing has stopped, give artificial respiration.

Dermal Exposure

In case of contact, immediately flush thoroughly with large amounts of water.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 – Fire Fighting Measures

Auto ignition Temp

N/A

Extinguishing Media**Suitable**

Use any suitable for adjacent material.

Firefighting**Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

None Indicated

Section 6 – Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, and heavy rubber gloves. (Refer to Section 8.)

Methods for Cleaning Up

Evacuate area. Absorb spill up. Place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. (See Section 13 for details on disposal.)

Section 7 – Handling and Storage

Handling**User Exposure**

Avoid inhalation. Avoid contact with eyes, skin, and clothing.

Storage**Suitable**

Keep tightly closed. Store at 2-8°C (35.6-46.4°F).

Special Requirements

Refrigerate.

Section 8 – Exposure Controls/PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment**Respiratory**

Material should be handled or transferred in an approved fume hood, or with a dust mask or with adequate ventilation.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles, with side shields.

Other

Protective clothing such as a lab coat.

General Hygiene Measures

Wash thoroughly after handling. Do not take internally.

Exposure Guidelines

No OSHA or ACHIH limits have been established.

Section 9 – Physical/Chemical Properties

Appearance

Physical State	Liquid		
Color	Pink		
Molecular Weight	N/A	MP/MP Range	N/A
BP/BP Range	N/A	Vapor Pressure	N/A
Vapor Density	N/A	Volatile %	N/A
SG/Density	N/A	Evaporation Rate	N/A
Flash Point °F	Non-Combustible	Freezing Point	N/A
Solubility in Water	N/A		

Section 10 – Stability and Reactivity

Stability

Stable

Stable.

Materials to Avoid

Strong oxidizing agents and strong bases.

Conditions to Avoid

None indicated.

Hazardous Decomposition Products

None indicated.

Hazardous Polymerization

Will not occur.

Section 11 – Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Toxicological Findings

To the best of our knowledge the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 – Ecological Information

No data available

Section 13 – Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Consultation with a licensed professional waste disposal service should be accomplished. Observe all Local, State and Federal environmental regulations.

Section 14 – Transport Information

DOT

Proper Shipping Name: Non-regulated.

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 – Regulatory Information

United States Regulatory Information

Sara Listed: No

TSCA Statement: This product is a “Mixture”.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Other Information

Disclaimer & Warranty

The information and recommendations contained on this data sheet are based on sources believed to be accurate and reliable, as of the date thereof, but are presented without guarantee, warranty or responsibility of any kind, expressed or implied. It is the user’s responsibility to determine the product’s safe use and to comply with all applicable Local, State and Federal laws for the product’s proper disposal. We reserve the right to rewrite the Material Safety Data Sheets periodically as new information becomes available.

N/A = not available



Material Safety Data Sheet

Date Updated: 5-15-08

Section 1 – Product and Company Information

Product Name ANDROSTENEDIONE ENZYME CONJUGATE

Product Numbers Component of Kit(s)#: 1-2902, 1-2902-5/1-2912, 1-2912-5

Company Salimetrics, LLC

Street Address 101 Innovation Boulevard
Suite 302

City, State, Zip, Country State College, PA 16803 USA

Technical Phone 814-234-7748

Fax 814-234-1608

Emergency Phone: 814-234-7748
(8am to 5:30pm, EST; Mon. – Fri.)

Section 2 – Composition/Information on Ingredients

<u>Component(s)</u>	<u>CAS #</u>	<u>*APPROX. %</u>	<u>SARA 313</u>
Water	7732-18-5	90-99 %	N/A
Sodium Chloride	7647-14-5	≤ 1 %	
Other components, non-carcinogenic		≤ 0.5 %	
Androstenedione Horseradish Peroxidase		< 0.1 %	

*Approx. % as wt/vol

Formula Solution

Section 3 – Hazards Identification

NFPA Rating

Health: 0 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 – First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. If breathing has stopped, give artificial respiration.

Dermal Exposure

In case of contact, immediately wash skin with soap and flush thoroughly with large amounts of water.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 – Fire Fighting Measures

Auto ignition Temp N/A

Extinguishing Media**Suitable**

Use any suitable for adjacent material.

Firefighting**Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

None Indicated.

Section 6 – Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, and heavy rubber gloves.

Methods for Cleaning Up

Evacuate area. Absorb spill up, containerize and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. (See Section 13 for details on disposal.)

Section 7 – Handling and Storage

Handling**User Exposure**

Avoid inhalation. Avoid contact with eyes, skin, and clothing.

Storage**Suitable**

Keep tightly closed. Store at 2-8⁰C (35.6-46.4⁰F).

Special Requirements

Refrigerate.

Section 8 – Exposure Controls/PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment**Respiratory**

Use in a well ventilated area.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

General Hygiene Measures

Wash thoroughly after handling. Do not take internally.

Exposure Guidelines

No OSHA or ACHIH limits have been established.

Section 9 – Physical/Chemical Properties

Appearance

Physical State	Liquid		
Color	Clear		
Molecular Weight	N/A	MP/MP Range	N/A
BP/BP Range	N/A	Vapor Pressure	N/A
Vapor Density	N/A	Volatile %	N/A
SG/Density	N/A	Evaporation Rate	N/A
Flash Point °F	Non-Combustible		
Solubility in Water	N/A		

Section 10 – Stability and Reactivity

Stability

Stable

Stable.

Materials to Avoid

Strong oxidizing agents and strong bases.

Hazardous Decomposition Products

None Indicated.

Hazardous Polymerization

Will not occur.

Section 11 – Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

RTECS Number: N/A

To the best of our knowledge, the chemical, physical and toxicological properties of these products have not been thoroughly investigated. Use Good Laboratory Practices when handling all of our products.

Section 12 – Ecological Information

No data available.

Section 13 – Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Consultation with a licensed professional waste disposal service should be accomplished. Observe all federal, state, and local environmental regulations.

Section 14 – Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 – Regulatory Information

United States Regulatory Information

Sara Listed: No

TSCA Statement: This product is a “Mixture”.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Other Information

Disclaimer & Warranty

The information and recommendations contained on this data sheet are based on sources believed to be accurate and reliable as of the date thereof, but are presented without guarantee, warranty or responsibility of any kind, expressed or implied. It is the user’s responsibility to determine the product’s safe use and to comply with all applicable Local, State and Federal laws for the product’s proper disposal. We reserve the right to rewrite the Material Safety Data Sheets periodically as new information becomes available.

N/A = not available



Material Safety Data Sheet

Date Updated: 5-15-08

Section 1 – Product and Company Information

Product Name ANDROSTENEDIONE STANDARD (2430 pg/mL)
Product Numbers Component of Kit(s)#: 1-2902, 1-2902-5/1-2912, 1-2912-5
Company Salimetrics, LLC
Street Address 101 Innovation Boulevard
Suite 302
City, State, Zip, Country State College, PA 16803 USA
Technical Phone 814-234-7748
Fax 814-234-1608
Emergency Phone: 814-234-7748
(8am to 5:30pm, EST; Mon. – Fri.)

Section 2 – Composition/Information on Ingredients

<u>Component(s)</u>	<u>CAS #</u>	<u>*APPROX. %</u>	<u>SARA 313</u>
Water	7732-18-5	90-99 %	N/A
Sodium Chloride	7647-14-5	≤ 1 %	
Other components, non-carcinogenic		≤ 0.5 %	
4-Androstene-3, 17-dione	63-05-8	< 0.1 %	

*Approx. % as wt/vol

Formula Solution

Section 3 – Hazards Identification

NFPA Rating

Health: 0 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 – First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. If breathing has stopped, give artificial respiration.

Dermal Exposure

In case of contact, immediately wash skin with soap and flush thoroughly with large amounts of water.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 – Fire Fighting Measures

Auto ignition Temp N/A

Extinguishing Media**Suitable**

Use any suitable for adjacent material.

Firefighting**Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

None Indicated.

Section 6 – Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, and heavy rubber gloves.

Methods for Cleaning Up

Evacuate area. Absorb spill up, containerize and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. (See Section 13 for details on disposal.)

Section 7 – Handling and Storage

Handling**User Exposure**

Avoid inhalation. Avoid contact with eyes, skin, and clothing.

Storage**Suitable**

Keep tightly closed. Store at 2-8⁰C (35.6-46.4⁰F).

Special Requirements

Refrigerate.

Section 8 – Exposure Controls/PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment**Respiratory**

Use in a well ventilated area.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles.

General Hygiene Measures

Wash thoroughly after handling. Do not take internally.

Exposure Guidelines

No OSHA or ACHIH limits have been established.

Section 9 – Physical/Chemical Properties

Appearance

Physical State	Liquid		
Color	Clear		
Molecular Weight	N/A	MP/MP Range	N/A
BP/BP Range	N/A	Vapor Pressure	N/A
Vapor Density	N/A	Volatile %	N/A
SG/Density	N/A	Evaporation Rate	N/A
Flash Point °F	Non-Combustible		
Solubility in Water	N/A		

Section 10 – Stability and Reactivity

Stability

Stable

Stable.

Materials to Avoid

Strong oxidizing agents and strong bases.

Hazardous Decomposition Products

None Indicated.

Hazardous Polymerization

Will not occur.

Section 11 – Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

RTECS Number: N/A

To the best of our knowledge, the chemical, physical and toxicological properties of these products have not been thoroughly investigated. Use Good Laboratory Practices when handling all of our products.

Section 12 – Ecological Information

No data available.

Section 13 – Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Consultation with a licensed professional waste disposal service should be accomplished. Observe all federal, state, and local environmental regulations.

Section 14 – Transport Information

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 – Regulatory Information

United States Regulatory Information

Sara Listed: No

TSCA Statement: This product is a “Mixture”.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Other Information

Disclaimer & Warranty

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N/A = not available



Material Safety Data Sheet

Date Updated: 5-27-09

Section 1 – Product and Company Information

1. Product Name ASSAY DILUENT

2. Product Name ESTRADIOL ASSAY DILUENT
Product Numbers Component of Kit(s) #: 1-3702, 1-3702-5/1-4702, 1-4702-5

Company Salimetrics, LLC
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City, State, Zip, Country State College, PA 16803 USA

Technical Phone 814-234-7748
Fax 814-234-1608

Emergency Phone: 814-234-7748
(8am to 5:30pm, EST; Mon. – Fri.)

Section 2 – Composition/Information on Ingredients

<u>Component(s)</u>	<u>CAS #</u>	<u>*APPROX.%</u>	<u>SARA 313</u>
Water	7732-18-5	90-99%	N/A
Sodium Chloride	7647-14-5	≤ 1	
Other components, non-carcinogenic		< 0.5%	

*Approx. % as wt/vol

Formula Solution

Section 3 – Hazards Identification

NFPA Rating

Health: 0 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 – First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician. If breathing has stopped, give artificial respiration.

Dermal Exposure

In case of contact, immediately flush thoroughly with large amounts of water.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 – Fire Fighting Measures

Auto ignition Temp N/A

Extinguishing Media**Suitable**

Use any suitable for adjacent material.

Firefighting**Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

None Indicated

Section 6 – Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, and heavy rubber gloves. (Refer to Section 8.)

Methods for Cleaning Up

Evacuate area. Absorb spill up. Place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. (See Section 13 for details on disposal.)

Section 7 – Handling and Storage

Handling**User Exposure**

Avoid inhalation. Avoid contact with eyes, skin, and clothing.

Storage**Suitable**

Keep tightly closed. Store at 2-8°C (35.6-46.4°F).

Special Requirements

Refrigerate.

Section 8 – Exposure Controls/PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment**Respiratory**

Material should be handled or transferred in an approved fume hood, or with adequate ventilation.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles with side shields.

General Hygiene Measures

Wash thoroughly after handling. Do not take internally.

Exposure Guidelines

No OSHA or ACHIH limits have been established.

Section 9 – Physical/Chemical Properties

Appearance

Physical State	Liquid		
Color	Pink		
Molecular Weight	N/A	MP/MP Range	N/A
BP/BP Range	N/A	Vapor Pressure	N/A
Vapor Density	N/A	Volatile %	N/A
SG/Density	N/A	Evaporation Rate	N/A
Flash Point °F	Non-Combustible		
Solubility in Water	N/A		

Section 10 – Stability and Reactivity

Stability

Stable

Stable.

Materials to Avoid

Strong oxidizing agents and strong bases.

Conditions to Avoid

None indicated.

Hazardous Decomposition Products

None indicated.

Hazardous Polymerization

Will not occur.

Section 11 – Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Medical Conditions Aggravated by Exposure

None

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Carcinogenicity:

None of the materials composing this mixture are listed as a cancer causing agents.

Section 12 – Ecological Information

No data available

Section 13 – Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Consultation with a licensed professional waste disposal service should be accomplished. Observe all federal, state, and local environmental regulations.

Section 14 – Transport Information

DOT

Proper Shipping Name: Non regulated

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

Section 15 – Regulatory Information

United States Regulatory Information

Sara Listed: No

TSCA Statement: This product is a “Mixture”. The CAS numbers of all components are listed on the TSCA Inventory.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Other Information

Disclaimer & Warranty

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N/A = not available



Material Safety Data Sheet

Date Updated: 9-16-10

Section 1 – Product and Company Information

1. Product Name 2M STOP SOLUTION

2. Product Name 3M STOP SOLUTION

Company Salimetrics, LLC
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Suite 302
City, State, Zip, Country State College, PA 16803 USA
Technical Phone 814-234-7748
Fax 814-234-1608

Emergency Phone: 814-234-7748
(8am to 5:30pm, EST; Mon. – Fri.)

Section 2 – Composition/Information on Ingredients

<u>Component(s)</u>	<u>CAS #</u>	<u>APPROX %</u>	<u>SARA 313</u>
Sulfuric Acid	7664-93-9	10 – 20 %	Y

Formula H₂SO₄
Synonyms Sulfuric Acid, Oil of Vitriol

Section 3 – Hazards Identification

NFPA Rating
Health: 3 Flammability: 0 Reactivity: 2 Special Hazards: W

EMERGENCY OVERVIEW
Causes severe burns.
May be fatal if inhaled or swallowed.
Strong Inorganic acid mists containing sulfuric acid can cause cancer.
May cause damage to respiratory passages and lungs.
Reacts violently with water.
Strong oxidizer.
For additional information on toxicity, please refer to Section 11.

Section 4 – First Aid Measures

Get medical assistance *for all cases of overexposure!*

Oral Exposure

Do NOT induce vomiting; dilute by giving milk or water if conscious; get medical attention immediately.

Inhalation Exposure

Remove to fresh air; give artificial respiration if breathing has stopped.

Dermal Exposure

Immediately flush thoroughly with large amounts of water.

Eye Exposure

Immediately flush thoroughly with water for at least 15 minutes.

Section 5 – Fire Fighting Measures

Auto ignition Temp N/A

Extinguishing Media

Suitable

Dry chemical or sand; DO NOT USE WATER OR FOAM.

Firefighting

Protective Equipment

Wear self-contained breathing apparatus and protective clothing.

Specific Hazard(s)

Reacts with most metals to form explosive hydrogen gas that can form explosive mixtures with air.

May ignite combustible material on contact.

Section 6 – Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear suitable protective equipment listed under Sec. 8, Exposure Controls/PPE

Methods for Cleaning Up

Evacuate the area of all unnecessary personnel. Eliminate any ignition sources until the area is determined to be free from explosion or fire hazards. Contain the release and eliminate its source, if this can be done without risk. Neutralize spill, take up and containerize for proper disposal as described under Sec. 13 Disposal Considerations.

Section 7 – Handling and Storage

Handling

User Exposure

Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Material must be handled or transferred in an approved fume hood or with equivalent ventilation.

Storage

Suitable

Keep container closed and protected against physical damage. Keep upright; separate from all incompatible materials.

Special Requirements

When diluting, add acid to water; NEVER ADD WATER TO ACID. Retained residue may make empty containers hazardous.

Section 8 – Exposure Controls/PPE

Engineering Controls

Safety shower, eye wash station, chemical fume hood.

Personal Protective Equipment

Respiratory

Material must be handled or transferred in an approved fume hood or with equivalent ventilation.

If workplace exposure limit(s) of product or any component is exceeded (see TLV/PEL), a NIOSH/MSHA approved air supplied respirator is advised in absence of proper environmental control. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (see your safety equipment supplier).

Hand

Protective gloves must be worn to prevent skin contact (Neoprene or equivalent).

Eye

Safety glasses with side shields must be worn at all times.

General Hygiene Measures

Impervious protective clothing should be worn to prevent skin contact. Do not take internally.

Wash hands thoroughly after handling.

Section 9 – Physical/Chemical Properties

Appearance

Physical State	Liquid	Color	Clear
Molecular Weight	98.08	PH	N/A
BP/BP Range (C 760 mmHg)	290+°C	MP/MP Range	-10°C
Freezing Point	N/A	Vapor Pressure (mm Hg):	1 146C
Vapor Density	N/A	Saturated Vapor Conc.	N/A
SG/Density(H₂O=1)	1.844 16/16C	Bulk Density	N/A
Odor Threshold	Sharp odor	Volatile %	N/A
VOC Content	N/A	Water Content	80 - 90%
Solvent Content	N/A	Evaporation Rate (BuAc=1)	<1
Viscosity	viscous	Partition Coefficient	N/A
Decomposition Temp.	N/A	Flash Point °F	Noncombustible.
Flash Point °C	Noncombustible.	Explosion Limits	N/A
Flammable Limits LEL%	N/A	Flammable Limits UEL%	N/A
Auto ignition Temp	N/A		
Solubility			
Solubility in Water	Miscible		

Section 10 – Stability and Reactivity

Stability

Stable

Stable

Materials to Avoid

Water, bases, oxidizers, reducing agents, metal powders, carbides, acetic acid, combustible material.

Conditions to Avoid

Adding water to acid can cause violent, exothermic reaction, possibly causing fire. Can react violently with alkalies.

Hazardous Decomposition Products

SO_x, Hydrogen (in presence of metals).

Hazardous Polymerization

Does not occur.

Section 11 – Toxicological Information

Route of Exposure

Skin Contact

Causes severe burns on contact with any body tissue.

Skin Absorption

Eye Contact

Causes severe burns on contact with any body tissue.

Inhalation

Possibly fatal. Inhalation of mist may damage respiratory tract and lungs.

Ingestion

Possibly fatal. Do not take internally.

RTECS Number:

Exposure Guidelines:

OSHA – PEL: 1 mg/M³ (TWA)

ACGIH – TLV: 1 mg/M³ (TWA); 3 mg/M³ (STEL)

Carcinogenicity:

Strong inorganic acid mists containing sulfuric acid can cause cancer.

Toxicity Data:

orl-rat LD50: 2140 mg/kg ihl-gpg LC50: 18 mg/cu.m.

Toxicological Findings:

Test on laboratory animals indicate material may produce adverse mutagenic and reproductive effects. Cited in Registry of Toxic Effects of Chemical Substances (RTECS).

Section 12 – Ecological Information

No Data Available

Section 13 – Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

EPA Waste Number: D002

Treatment:

Specified Technology

Neutralize to pH 6-9. ALWAYS contact a permitted waste disposer (TSD) for permissible treatment sites and to assure compliance with all current local, state and federal regulations.

Comply with Federal, State, and Local regulations on reporting releases. Refer to Sec. 15 Regulatory Information for reportable quantities and other regulatory data.

Section 14 – Transport Information

DOT

Proper Shipping Name

Sulfuric Acid

DOT ID Number

UN1830

Section 15 – Regulatory Information

United States Regulatory Information

The CAS number of this product is listed on the TSCA Inventory.

Component	SARA EHS (302)	SARA EHS TPQ (Lbs)	CERCLA RQ (Lbs)
Sulfuric Acid	Y	1000	1000

Component	OSHA Floor List	SARA 313	DeMinimis For SARA 313 (%)
Sulfuric Acid	Y	Y	1.0

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

DSL:

NDSL:

Section 16 – Other Information

Warranty & Disclaimer

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N/A = not available



Material Safety Data Sheet

Date Updated: 5-14-08

Section 1 – Product and Company Information

Product Name 10X WASH BUFFER CONCENTRATE

Company Salimetrics, LLC

Street Address 101 Innovation Boulevard
Suite 302

City, State, Zip, Country State College, PA 16803 USA

Technical Phone 814-234-7748 **Emergency Phone:** 814-234-7748
(8am to 5:30pm, EST; Mon. – Fri.)

Fax 814-234-1608

Section 2 – Composition/Information on Ingredients

<u>Component(s)</u>	<u>CAS #</u>	<u>*APPROX.%</u>	<u>SARA 313</u>
Water	7732-18-5	80 – 90%	N/A
Sodium Chloride	7647-14-5	0 –10%	
Sodium Phosphate, Dibasic Anhydrous	7558-79-4	0 –5%	
Potassium Chloride	7447-40-7	0 –1%	
Potassium Phosphate	7778-77-0	0 –1%	
Polyoxyethylene Sorbitan Monolaurate, (Tween 20)	9005-64-5	0 – 2%	
Other Components		< 0.1% Non carcinogenic	

*Approx. % as wt/vol

Formula Solution

Section 3 – Hazards Identification

NFPA Rating

Health: 0 Flammability: 0 Reactivity: 0

For additional information on toxicity, please refer to Section 11.

Section 4 – First Aid Measures

Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure

If inhaled, remove to fresh air. If breathing becomes difficult, give oxygen, and call a physician. If breathing has stopped, give artificial respiration.

Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water. Wash contaminated clothing before reuse.

Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Section 5 – Fire Fighting Measures

Extinguishing Media**Suitable**

Water Spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Firefighting**Protective Equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific Hazard(s)

May emit toxic fumes under fire conditions.

Section 6 – Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear self-contained breathing apparatus, chemical safety goggles, rubber boots and heavy rubber gloves.

Methods for Cleaning Up

Cover spill with dry lime or soda ash. Pick up, place in a closed container and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete. (See Section 13 for details on disposal.)

Section 7 – Handling and Storage

Handling**User Exposure**

Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage**Suitable**

Keep tightly closed. Store at 2-8⁰C (35.6-46.4⁰F).

Special Requirements

Refrigerate.

Section 8 – Exposure Controls/PPE

Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment**Respiratory**

NIOSH/MSHA – approved respirator.

Hand

Compatible chemical-resistant gloves.

Eye

Chemical safety goggles with side shields.

General Hygiene Measures

Wash thoroughly after handling.

Section 9 – Physical/Chemical Properties

Appearance

Physical State	Liquid		
Color	Clear		
Molecular Weight	N/A	MP/MP Range	N/A
BP/BP Range	N/A	Vapor Pressure	N/A
Vapor Density	N/A	Volatile %	N/A
SG/Density	N/A	Evaporation Rate	N/A
Flash Point °F	>230°F	Flash Point °C	>109°C
Solubility in Water	N/A		

Section 10 – Stability and Reactivity

Stability

Stable

Stable.

Materials to Avoid

Strong oxidizing agents and strong bases.

Conditions to Avoid

None indicated.

Hazardous Decomposition Products

May emit toxic fumes of carbon dioxide & carbon monoxide.

Hazardous Polymerization

Will not occur.

Section 11 – Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

RTECS Number: N/A (for mixture). Polysorbate 20: #TR7400000. See actual entry in RTECS for more complete information.

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12 – Ecological Information

No data available

Section 13 – Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Contact a licensed professional waste disposal service to dispose of this material.

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Observe all federal, state, and local environmental regulations.

Section 14 – Transport Information

Not Regulated.

DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

Section 15 – Regulatory Information

United States Regulatory Information

Sara Listed: No

TSCA Statement: This product is a “Mixture”. The CAS numbers of all components are listed on the TSCA Inventory.

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Other Information

Disclaimer & Warranty

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N/A = not available



Material Safety Data Sheet

Date Updated: 5-14-08

Section 1 – Product and Company Information

Product Name TMB - One Component Peroxidase Substrate

Company Salimetrics, LLC
Street Address 101 Innovation Boulevard
Suite 302
City, State, Zip, Country State College, PA 16803 USA

Technical Phone 814-234-7748
Fax 814-234-1608

Emergency Phone: 814-234-7748
(8am to 5:30pm, EST; Mon. – Fri.)

Section 2 – Composition/Information on Ingredients

<u>Component(s)</u>	<u>CAS #</u>	<u>APPROX %</u>	<u>SARA 313</u>
Non-carcinogenic analog of Benzedine	N/A	N/A	
3,3',5,5' Tetramethybenzidine		≤ 0.05 %	
Nonreducing Oligosaccharides		≤ 3 %	
Polypeptide Complex		≤ 0.01%	
Hydrogen Peroxide		≤ 0.02 %	
.			
Formula	N/A		
Synonyms			

Section 3 – Hazards Identification

Health hazards not known at this time.
This TMB 1 component does not contain aprotic solvents.
For additional information on toxicity, please refer to Section 11.

Section 4 – First Aid Measures

Oral Exposure

Induce vomiting and consult a physician.

Inhalation Exposure

In inhaled, remove to fresh air. If breathing is difficult give oxygen. If not breathing, give artificial respiration. If discomfort persists obtain medical attention.

Dermal Exposure

Wash with soap and water. Wash contaminated clothing before reuse.

Eye Exposure

Flush with copious amounts of water or eyewash saline for at least 15 minutes.

Section 5 – Fire Fighting Measures

Auto ignition Temp N/A

Extinguishing Media

Suitable

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

Special Procedure

None special

Unusual Firefighting Procedures

None special

Section 6 – Accidental Release Measures

Procedure(s) of Personal Precaution(s)

Wear cotton filter mask.

Methods for Cleaning Up

Cover with absorbant.

Section 7 – Handling and Storage

Handling

User Exposure

Avoid contact with skin; avoid ingestion.

Storage

Suitable

Keep lid tightly closed. Store at 2°C to 8°C.

Special Requirements

Refrigerate and protect from direct sunlight or UV sources.

Section 8 – Exposure Controls/PPE

Engineering Controls

Safety shower, eye bath and local exhaust.

Personal Protective Equipment

Respiratory

Wear cotton mask. Use local exhaust

Hand

Wear rubber or vinyl gloves.

Eye

Safety glasses / goggles.

Other

Laboratory apron or equivalent.

General Hygiene Measures

Wash thoroughly after handling. Do not take internally.

Section 9 – Physical/Chemical Properties

Appearance

Physical State	Liquid
Color	Clear to light yellow
PH	3.55 ± 0.20
SG/Density	1.010
Flammable Limits	N/A
Absorbance @ 280nm to 290nm	0.450 ± 0.100
@ 620nm to 650nm	0.001 ± 0.020

Section 10 – Stability and Reactivity

Stability

Stable

Stable for minimum of 2 years @ 2 – 8°C.

Materials & Conditions to Avoid

Strong oxidizing agents, metal.

Protect from direct UV light; avoid elevated temperatures.

Hazardous Decomposition Products

None known

Hazardous Polymerization

Will not occur

Section 11 – Toxicological Information

Route of Exposure

Skin Contact

May cause skin irritation.

Skin Absorption

May be harmful if absorbed through skin.

Eye Contact

May cause eye irritation.

Inhalation

May be harmful if inhaled.

Ingestion

May be harmful if swallowed.

RTECS Number N/A

Signs & Symptoms of Exposure

Not known at this time.

Mild oxidizing agent; toxicological properties have not been thoroughly investigated.

Section 12 – Ecological Information

No data available.

Section 13 – Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation

Normal disposal with copious amounts of water. Observe all local, state, and federal regulations.

Section 14 – Transport Information

This TMB 1 component does not contain aprotic solvents.

Section 15 – Regulatory Information

United States Regulatory Information

Sara Listed: N/A

Canada Regulatory Information

WHMIS Classification

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

Section 16 – Other Information

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N/A = not available