

### 1. IDENTIFICATION

**Product name:** Estradiol (CATALOG No. S1111)

**Product Use:** For the quantitative determination of estradiol (E2) concentration in human serum.

**Supplier:** POINTE SCIENTIFIC INC.  
5449 Research Drive  
Canton, Michigan 48188  
Ph: 1-734-487-8300  
Fax: 1-734-483-1592  
Email: [info@pointescientific.com](mailto:info@pointescientific.com)

**Emergency:** Pointe Scientific, Inc. Tel. 1-800-445-9853

### 2. HAZARD(S) IDENTIFICATION

**Conjugate Reagent:**

Hazard Classifications:

Sensitization, skin (Category 1)

Hazard Statements

H317: May cause an allergic skin reaction

Precautionary Statements

**Prevention:**

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P363: Wash contaminated clothing before reuse.  
P302 + P352: IF ON SKIN: wash with plenty of soap and water.  
P333 + P313: IF SKIN irritation or rash occurs: Get medical advice/attention.

**Storage:**

N/A

**Disposal:**

P501: Dispose of contents to an approved waste disposal plant.



**Signal Word:** Warning

**Reference Standards:**

Hazard Classifications:

Sensitization, skin (Category 1)  
Skin Corrosion/Irritation (Category 2)

Hazard Statements

H315: Causes skin irritation  
H317: May cause an allergic skin reaction

Precautionary Statements

**Prevention:**

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264: Wash skin thoroughly after handling.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P363: Wash contaminated clothing before reuse.  
P302 + P352: IF ON SKIN: wash with plenty of soap and water.  
P333 + P313: IF SKIN irritation or rash occurs: Get medical advice/attention.

**Storage:**

N/A

**Disposal:**

P501: Dispose of contents to an approved waste disposal plant.



**Signal Word:** Warning

### Estradiol Control Set:

#### Hazard Classifications:

Sensitization, skin (Category 1)  
Skin Corrosion/Irritation (Category 2)

#### Hazard Statements

H315: Causes skin irritation  
H317: May cause an allergic skin reaction

#### Precautionary Statements

##### **Prevention:**

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264: Wash skin thoroughly after handling.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.

##### **Response:**

P363: Wash contaminated clothing before reuse.  
P302 + P352: IF ON SKIN: wash with plenty of soap and water.  
P333 + P313: IF SKIN irritation or rash occurs: Get medical advice/attention.

##### **Storage:**

N/A

##### **Disposal:**

P501: Dispose of contents to an approved waste disposal plant.



**Signal Word:** Warning

### TMB Reagent:

#### Hazard Classifications:

Not a hazardous substance or mixture.

#### Pictogram:

Not required.

#### Signal Word:

Not required.

#### Hazard Statements

Not a hazardous substance or mixture.

#### Precautionary Statements

Not a hazardous substance or mixture.

### Stop Solution:

#### Hazard Classifications:

Skin corrosion/irritation (Category 1)  
Serious eye damage/eye irritation (Category 1)  
Sensitization, respiratory (Category 1)  
Specific target organ toxicity, single exposure; respiratory system (Category 1)  
Specific target organ toxicity, repeat exposure; respiratory system and teeth (Category 1)

#### Hazard Statements

H314: Causes severe skin burns and eye damage  
H318: Causes serious eye damage  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H370: Causes damage to organs  
H372: Causes damage to organs through prolonged or repeated exposure



**Signal Word:** Danger

#### Precautionary Statements

##### **Prevention:**

P260: Do not breathe dust/fume/gas/mist/vapors/spray.  
P264: Wash skin thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P285: In case of inadequate ventilation wear respiratory protection.

##### **Response:**

P310: Immediately call a POISON CENTER or doctor/physician.  
P314: Get medical advice/attention if you feel unwell.  
P363: Wash contaminated clothing before reuse.  
P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353: IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
P304 + P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P307 + P311: IF exposed: call a POISON CENTER or doctor/physician.

P342 + P311: IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.

**Storage:**

P404: Store in a closed container.

**Disposal:**

P501: Dispose of contents to sewer system, if in accordance with local regulations.

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Conjugate Reagent:** Proclin 300 (CAS # 55965-84-9) <0.1%  
**Reference Standards:** Proclin 300 (CAS # 55965-84-9) <0.1%  
**Controls:** Proclin 300 (CAS # 55965-84-9) <0.1%  
**TMB Reagent:** 3,3',5,5'-Tetramethylbenzidin (CAS # 54827-17-7) <0.05%  
**Stop Solution:** Hydrochloric Acid (CAS # 7647-01-0) <3.65%

### 4. FIRST AID MEASURES

**SKIN:** In case of contact, immediately take of contaminated clothing and/or shoes. Wash off with soap and plenty of water. Consult a physician.  
**EYES:** Rinse thoroughly with plenty of water for at least 15 minutes and get medical attention. Continue rinsing eyes during transport to a medical facility.  
**ORAL:** Do not induce vomiting. Rinse mouth with water. Consult a physician.  
**INHALATION:** If inhaled move victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen, and call physician.

### 5. FIRE-FIGHTING MEASURES

**Flammable:** NO  
**Extinguishing media:** As appropriate for fire in surrounding materials. Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.  
**Flash point:** Not Applicable  
**Upper flammable limit:** Not Applicable  
**Lower flammable limit:** Not Applicable  
**Auto ignition temperature:** Not Applicable  
**Hazardous combustion products:** Carbon oxides, nitrogen oxides, Sulphur oxides, hydrogen chloride gas

Explosion data

**Sensitivity to mechanical impact:** Not Applicable  
**Sensitivity to static discharge:** Not Applicable  
**Unusual fire and explosion hazards:** No Data

### 6. ACCIDENTAL RELEASE MEASURES

**Local exhaust:** Not Required  
**Protective clothing:** Lab Coat  
**Protective gloves:** Rubber/Latex  
**Eye protection:** Safety glasses  
**Respiratory protection:** Required if inadequate ventilation.  
**Leak and spill procedure:** Soak up with absorbent material and dispose of to a waste disposal plant. Prevent entry into water system.

### 7. HANDLING AND STORAGE

**Handling:** Normal precautions for handling chemicals must be observed.  
**Storage:** Store between +2°C and +8°C  
**Shipping regulations:** Not regulated

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Local exhaust:** Not Required  
**Protective clothing:** Lab Coat  
**Protective gloves:** Rubber/Latex  
**Eye protection:** Safety glasses  
**Respiratory protection:** None normally required.  
**Other precautions:** Avoid contact and inhalation, do not get in eyes, on skin or clothing. Do not pipet by mouth. Wash contaminated clothing before reuse.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Kit Component / Chemical	Standard/Conjugate/ Controls (ProClin 300)	TMB Reagent (3,3',5,5'-Tetramethylbenzidin)	Stop Solution (1 N HCl)
(a) Appearance: Form: Color	Liquid slight yellow	Liquid Clear	Liquid Clear
(b) Odour	odourless	odourless	odourless
(c) Odour threshold	no data available	no data available	no data available
(d) pH	7.0-7.4	3.35 – 3.75	<1.0
(e) Melting point/freezing point	no data available	no data available	no data available
(f) Initial boiling point and boiling range	no data available	no data available	no data available
(g) Flash point	no data available	no data available	no data available
(h) Evaporation rate	no data available	no data available	no data available
(i) Flammability (solid, gas)	no data available	no data available	no data available
(j) Upper/lower flammability or explosive limits	no data available	no data available	no data available
(k) Vapor pressure	no data available	no data available	no data available
(l) Vapor density	no data available	no data available	no data available
(m) Relative density	no data available	no data available	no data available
(n) Solubility(ies)	no data available	no data available	no data available
(o) Partition coefficient: n-octanol/water	no data available	no data available	no data available
(p) Auto-ignition temperature	no data available	no data available	no data available
(q) Decomposition temperature	no data available	no data available	no data available
(r) Viscosity	no data available	no data available	no data available
(s) Explosive properties	no data available	no data available	no data available
(t) Oxidising properties	no data available	no data available	no data available

## 10. STABILITY AND REACTIVITY

**Stable:** Yes

**Hazardous polymerization:** Will not occur.

**Incompatibility with other substances:** No known materials

**Hazardous decomposition products:** Not Available

## 11. TOXICOLOGICAL INFORMATION

### ROUTE OF ENTRY/EXPOSURE

SKIN CONTACT: [x] EYE CONTACT: [x] INHALATION: [x] INGESTION: [x] SKIN ABSORPTION [x]

### Effects of acute exposure:

**SKIN CONTACT:** May cause irritation.

**EYE CONTACT:** May cause irritation.

**INGESTION:** May be harmful if ingested.

**INHALATION:** May cause irritation to mucous membranes and upper respiratory tract.

**Effects of chronic exposure:** No data available.

**SENSITIZATION TO PRODUCT:** Not Available

**SYNERGISTIC PRODUCTS:** Not Available

**LD50: MOPSO:** Not Available

## 12. ECOLOGICAL INFORMATION

**Water Hazard Class:** Data not yet available

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal:** Dispose of in accordance with local official environmental regulations

**14. TRANSPORT INFORMATION**

**Shipping information:** Not regulated

**15. REGULATORY INFORMATION**

Not applicable.

**16. OTHER INFORMATION**

The information herein is believed to be correct as of the date hereof but is provided without warranty of any kind. The recipient of our products is responsible for observing any laws and guidelines applicable.

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Rev. 4/17