

Aviva Systems Biology Corporation

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Web: www.avivasysbio.com

Safety Data Sheet

Product Identification

- Product Name: Human Alpha 1-Antitrypsin ELISA Kit
- Catalog Number: OKIA00048
- Company: Aviva Systems Biology Corp, 6370 Nancy Ridge Dr Ste 104, San Diego, CA 92121 USA., 858-552-6979, info@avivasysbio.com
- Product Components: Antibody Coated Micro wells, Calibrator (sodium azide), Enzyme-Antibody Conjugate (thimerosal), 5X
 Diluent (Proclin 300), 20X Wash Solution (Proclin 300), Chromogen-Substrate Solution (3,3',5,5'-Tetramethylbenzidine(TMB), Stop Solution (sulfuric acid)
- CAS Number: Not Applicable to product
- EC Index Number: Not Applicable to product
- EC List Number: Not Applicable to product
- REACH Registration Number: Not Applicable to product
- Emergency Phone Number: 911 if in USA. Use relevant local phone number if outside USA.

1. Substance Identification

- Component: Stop Solution which contains 0.3M sulfuric acid.
- CAS Number: 7664-93-9
 EC Index Number: 016-020-00-8
- EC List Number: 231-639-5
- REACH Registration Number: 01-2119458838-20-XXXX
- Product Use: Research Use Only. For In Vitro Use Only.
- Product Use advised against: NOT for Diagnostic Use. Not for Human or Animal Consumption.
- Emergency Phone Number: 911 if in USA. Use relevant local phone number if outside USA.

2. Hazard Identification

Hazard classification - Irritant
 Signal word - Warning

• GHS labelling -

Hazard statements - H315, May causes skin irritation. H319, May causes eye irritation.

Precautionary statements - P280, Wear protective gloves/protective clothing/eye protection/face protection. P270, Do not eat, drink or smoke when using this product. P264, Wash hands

thoroughly after use.

Practice good laboratory hygiene.

3. Composition/Information on Ingredients

Kit Component	Ingredient	CAS#	EC Number	Index Number	Concentration in
					mixture
Stop Solution	Sulfuric Acid	7664-93-9	231-639-5	016-020-00-8	0.3M, ≤3%,

4. First Aid Measures

Ingestion: wash mouth with water provided person is conscious. Call a physician or poison control.

- <u>Inhalation Exposure:</u> remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- <u>Skin Exposure:</u> immediately flush with copious amounts of water and wash with soap and water. Remove contaminated clothing and shoes. Call a physician if irritation or discomfort develops.
- <u>Eye Exposure:</u> flush the eyes with copious amounts of water for at least 15 minutes. Remove contact lenses if present and flush for at least 15 minutes. Do not re-insert contact lenses. Assure adequate flushing by separating eyelids with fingers. Call a physician.
- Most Important symptoms, acute and delayed: skin or tissue irritation; burns may be possible if response delayed.

5. Fire Fighting measures

- Dry chemical, foam, carbon dioxide, or water fire extinguisher.
- Firefighting media should be selected depending on the surrounding materials and equipment. Ambient fire may liberate hazardous vapors. It is recommended that firefighters wear protective gear and self-contained breathing apparatus to limit their exposure.

6. Accidental Release Measures

Ventilate area. Wear appropriate protective gear. Use paper towels or chemical wicks to wipe up and pick-up spilled materials.
 Dispose of waste in accordance with federal, state, and local regulations. Avoid putting any component into drain or sewer systems. Wash spill site thoroughly with soap and water after material pick up is complete.

7. Handling and Storage

- Should only be handled and used by qualified, trained professionals. Wear protective eyewear, clothing, gloves and other gear whenever handling.
- Store all components at 4°C unless indicated otherwise on the product data sheet.

8. Exposure Controls/Personal Protection

- OSHA Permissible Exposure Level (PEL) information not available at the supplied concentrations.
- Biological limit values information not available at the supplied concentrations.
- DNEL for worker or consumer information not available at the supplied concentrations.
- PNEC information not available at the supplied concentrations.
- <u>Engineering Controls:</u> Use with adequate ventilation and illumination. Check that functional eyewash stations and safety showers are close to the workstation location.
- <u>Individual Protection Measures:</u> Wear suitable protective clothing and appropriate footwear as protection against splashing or contamination. Wear approved safety eyewear and protective gloves. General good laboratory hygiene should be maintained at all times. Wash hands before work breaks and on finishing the work.
- Environmental exposure controls: Keep product closed when not in use. Dispose of waste in accordance with federal, state, and local regulations.

9. Physical and Chemical Properties

- Physical State and Appearance:
- Appearance: clear liquid solution
- Solubility: soluble in water
- Odor: None detectable
- Odor Threshold: No data at supplied concentration
- pH: pH ~0.5
- Flash point: No data at supplied concentration
- Melting point: No data at supplied concentration
- Boiling Point: No data at supplied concentration
- Boiling Range: No data at supplied concentration
- Evaporation rate: No data at supplied concentration
- Flammability: Not Flammable
- Upper/Lower Flammability: No data at supplied concentration
- Explosive Limits: No data at supplied concentration
- Vapor Pressure: No data at supplied concentration
- <u>Vapor Density:</u> No data at supplied concentration
- Relative Density: No data at supplied concentration
- <u>Solubility:</u> No data at supplied concentration
- Partition coefficient: n-octanol/water: No data at supplied concentration
- <u>Auto-ignition temperature:</u> No data at supplied concentration
- Decomposition Temperature: No data at supplied concentration

Viscosity: No data at supplied concentration

10. Stability and Reactivity

- Reactivity: Do not add water as the resulting mixture may become exothermic. Avoid contact with metals as hydrogen gas may
 be produced
- Chemical Stability: stable under normal ambient, storage, and handling temperature conditions.
- Hazardous Reactions: No data at supplied concentration
- Conditions to avoid: No data at supplied concentration
- Incompatible Materials: water, strong oxidizing agents, strong bases, metals
- <u>Hazardous decomposition products:</u> sulfur oxide and hydrogen gases may be released during a fire.

11. Toxicological Information

Acute toxicity
 No data at supplied concentration

Skin corrosion / irritation
 Serious eye damage / irritation
 May cause irritation
 May cause irritation

Respiratory or skin sensitization
 Germ cell mutagenicity
 No data at supplied concentration
 No data at supplied concentration

Carcinogenicity
 Reproductive toxicity
 No data at supplied concentration
 No data at supplied concentration

Specific target organ toxicity (single exposure)
 Specific target organ toxicity (repeated exposure)
 No data at supplied concentration
 No data at supplied concentration

Aspiration hazard
 Symptoms / injuries after inhalation
 Symptoms / injuries after skin contact
 Symptoms / injuries after eye contact
 Symptoms / injuries after eye contact
 Mo data at supplied concentration
 May cause irritation
 May cause irritation
 May cause irritation

Symptoms / injuries after eye contact - May cause irritation
Symptoms / injuries after ingestion - May cause irritation

12. Ecological Information

No data at supplied concentration.

- Ecotoxicity: No data at supplied concentration
- Persistence and degradability: No data at supplied concentration
- Bioaccumulative potential: No data at supplied concentration
- Mobility in soil: No data at supplied concentration

13. Disposal Considerations

- Waste must be disposed according to federal, state, and local regulations.
- Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging should be disposed of in the same manner as unused product.

14. Transport Information

- No special transport regulations at the supplied concentration.
- UN number 2796
- · Shipping Name is sulfuric acid
- Hazard class 8
- Packing group III
- International: ADR,AND, IMDG, IATA: not applicable
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC: not applicable.

15. Regulatory Information

- No hazardous ingredient in an amount that requires identification and labeling in the supplied concentration.
- SARA 313: on the list
- CERCLA: not on the list
- California Proposition 65: on the list
- US State Right to Know: Massachusetts, New Jersey, Pennsylvania, Illinois, Rhode Island
- International regulations: 1272/2008 and European Directive 1999/45/CE. European Standard 1907/2006/EC is not applicable.
 Directive 96/82/EC (Seveso Directive) is not applicable.
- Regulation (EC) No. 1907/2006 (REACH): Chemical not included in the Candidate List of Substances of Very High Concern (SVHC).

- REACH No.: A registration number is not available for this substance as the substance or its uses are exempted
 from registration, the annual tonnage does not require a registration.
- No chemical safety assessment has been performed for the product.

16. Other Information

Document Creation Date: December 20, 2019

Document Revision Date: N/A
 Description of Change(s): N/A

- The above information is believed to be correct but does not purport to be all-inclusive. This document is intended to be used only as a guide. It is incumbent on the user to read and fully understand the document prior to using the product or any of its components. Aviva Systems Biology Corp shall not be liable or responsible in any way for use of either this information or the product supplied. Final determination of suitability and safe use of these materials is the sole responsibility of the user. Although a level of information has been made available, it is not a guarantee that no other hazards exist or will not appear during the use of the product and its components.
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1. Substance Identification

Component: Chromogen-Substrate Solution which contains 3,3',5,5'-Tetramethylbenzidine(TMB).

Company: Aviva Systems Biology Corp, 6370 Nancy Ridge Dr Ste 104, San Diego, CA 92121 USA., 858-552-6979, info@avivasysbio.com

CAS Number: 54827-17-7
EC Index Number: 259-364-6
EC List Number: None found

REACH Registration Number: Not available or not required.

<u>Emergency Phone Number:</u> 911 if in USA. Use relevant local phone number if outside USA.

2. Hazard Identification

Hazard classification - IrritantSignal word - Warning

GHS labelling -



Hazard statements - H315, May causes skin irritation. H319, May causes eye irritation.

H335, May cause respiratory irritation.

Precautionary statements - P280, Wear protective gloves/protective clothing/eye protection/face protection.

P270. Do not eat, drink or smoke when using this product. P264, Wash hands

thoroughly after use.

Practice good laboratory hygiene.

3. Composition/Information on Ingredients

Kit Component	Ingredient	CAS#	EC Number	Index Number	Concentration in mixture
Chromogen- Substrate (TMB)	3,3',5,5'- Tetramethylbenzidine	54827-17-7	259-364-6	None Found	≤0.05%

4. First Aid Measures

- Ingestion: wash mouth with water provided person is conscious. Call a physician or poison control.
- <u>Inhalation Exposure:</u> remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- <u>Skin Exposure</u>: immediately flush with copious amounts of water and wash with soap and water. Remove contaminated clothing and shoes. Call a physician if irritation or discomfort develops.
- <u>Eye Exposure:</u> flush the eyes with copious amounts of water for at least 15 minutes. Remove contact lenses if present and flush for at least 15 minutes. Do not re-insert contact lenses. Assure adequate flushing by separating eyelids with fingers. Call a physician.

Most Important symptoms, acute and delayed: skin or tissue irritation

5. Fire Fighting measures

- Dry chemical, foam, carbon dioxide, or water fire extinguisher.
- Firefighting media should be selected depending on the surrounding materials and equipment. Ambient fire may liberate hazardous vapors. It is recommended that firefighters wear protective gear and self-contained breathing apparatus to limit their exposure.

6. Accidental Release Measures

Ventilate area. Wear appropriate protective gear. Use paper towels or chemical wicks to wipe up and pick-up spilled materials.
 Dispose of waste in accordance with federal, state, and local regulations. Avoid putting any component into drain or sewer systems. Wash spill site thoroughly with soap and water after material pick up is complete.

7. Handling and Storage

- Should only be handled and used by qualified, trained professionals. Wear protective eyewear, clothing, gloves and other gear whenever handlings.
- Store all components at 4°C unless indicated otherwise on the product data sheet.

8. Exposure Controls/Personal Protection

- OSHA Permissible Exposure Level (PEL) information not available at the supplied concentrations.
- Biological limit values information not available at the supplied concentrations.
- DNEL for worker or consumer information not available at the supplied concentrations.
- PNEC information not available at the supplied concentrations.
- <u>Engineering Controls:</u> Use with adequate ventilation and illumination. Check that functional eyewash stations and safety showers are close to the workstation location.
- <u>Individual Protection Measures:</u> Wear suitable protective clothing and appropriate footwear as protection against splashing or contamination. Wear approved safety eyewear. Wear protective gloves such as nitrile, PVC, polyethylene or vinyl. General good laboratory hygiene should be maintained at all times. Wash hands before work breaks and on finishing the work.
- Environmental exposure controls: Keep product closed when not in use. Dispose of waste in accordance with federal, state, and local regulations.

9. Physical and Chemical Properties

- Physical State and Appearance:
- Appearance: clear to pale yellow liquid solution
- Solubility: soluble in water
- Odor: No data available
- Odor Threshold: No data available
- pH: 3.3 3.8
- Flash point: No data available
- Melting point: No data available
- Boiling Point: No data available
- Boiling Range: No data available
- Evaporation rate: No data available
- Flammability: Not Flammable
- Upper/Lower Flammability: No data available
- Explosive Limits: Not Explosive
- Vapor Pressure: No data available
- Vapor Density: No data available
- Relative Density: 1.01 (H₂O = 1.0)
- Solubility: 100% in water
- Partition coefficient: n-octanol/water: No data available
- Auto-ignition temperature: No data available
- <u>Decomposition Temperature:</u> No data available
- Viscosity: No data available

10. Stability and Reactivity

- Reactivity: None known under normal conditions of use
- <u>Chemical Stability:</u> stable under normal ambient, storage, and handling temperature conditions.
- Hazardous Reactions: None known under normal conditions of use
- Conditions to avoid: exposure to light, exposure to elevated temperatures, exposure to moisture

- Incompatible Materials: strong oxidizing agents, metals
- <u>Hazardous decomposition products:</u> under thermal conditions carbon oxides, nitrogen oxides

11. Toxicological Information

No data available Acute toxicity Skin corrosion / irritation No data available Serious eye damage / irritation No data available Respiratory or skin sensitization No data available Germ cell mutagenicity No data available Carcinogenicity No data available Reproductive toxicity No data available Specific target organ toxicity (single exposure) No data available Specific target organ toxicity (repeated exposure) No data available Aspiration hazard No data available Symptoms / injuries after inhalation May cause irritation Symptoms / injuries after skin contact May cause irritation Symptoms / injuries after eye contact May cause irritation Symptoms / injuries after ingestion May cause irritation

12. Ecological Information

- <u>Toxicity</u>: No data available.
- Ecotoxicity: No data available
- Persistence and degradability: No data available
- Bioaccumulative potential: No data available
- Mobility in soil: No data available

13. Disposal Considerations

- Waste must be disposed according to federal, state, and local regulations.
- Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging should be disposed of in the same manner as unused product.

14. Transport Information

- No special transport regulations at the supplied concentration.
- No UN# or shipping name .
- Not dangerous goods in accordance with DOT (US)/ADR/RID/ADNR/IMDG/ICAO/IATA
- All chemical substances in this product are listed in the EPA TSCA inventory. All the constituents of this preparation are registered in the EINECS inventory or in the ELINCS list.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC: not applicable.

15. Regulatory Information

- No hazardous ingredient in an amount that requires identification for substance and mixture.
- No chemicals requiring reporting for SARA 302, SARA 313.
- Right to know: Pennsylvania, New Jersey
- California: no chemicals requiring regulation under California Prop. 65.
- Regulation (EC) No. 1907/2006 (REACH): Chemical not included in the Candidate List of Substances of Very High Concern (SVHC).
- REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration.
- Product not controlled under the Seveso II Directive.
- None of the components are included in Annex XIV.
- German hazard class for 1 Appendix No. 4
- No chemical safety assessment has been performed for the product

16. Other Information

Document Creation Date: December 20, 2019

Document Revision Date: N/A

Description of Change(s): N/A

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these materials is the sole responsibility of the user. Although a level of information has been made available, it is not a guarantee that no other hazards exist or will not appear during the use of the product and its components.

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End of section

1. Substance Identification

Components: the 5X Diluent Buffer and the 20X Wash Solution contain Proclin 300.

Company: Aviva Systems Biology Corp, 6370 Nancy Ridge Dr Ste 104, San Diego, CA 92121 USA., 858-552-6979, info@avivasysbio.com

CAS Number: 55965-84-9
EC Index Number: 613-167-00-5
EC List Number: 932-593-5

REACH Registration Number: Not Available or not required

• <u>Product Use:</u> Research Use Only. For In Vitro Use Only.

Product Use advised against: NOT for Diagnostic Use. Not for Human or Animal Consumption.

• Emergency Phone Number: 911 if in USA. Use relevant local phone number if outside USA.

2. Hazard Identification

Hazard classification - IrritantSignal word - Warning

GHS labelling -

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Hazard statements - H315, May causes skin irritation.

Precautionary statements - P280, Wear protective gloves/protective clothing/eye protection/face protection.

P270, Do not eat, drink or smoke when using this product. P264, Wash hands

thoroughly after use.

Practice good laboratory hygiene.

3. Composition/Information on Ingredients

Kit Component	Ingredient	CAS#	EC Number	Index Number	Concentration in mixture
5X Diluent	Proclin 300	55965-84-9	932-593-5	613-167-00-5	≤0.25%
20X Wash Buffer	Proclin 300	55965-84-9	932-593-5	613-167-00-5	≤0.05%

4. First Aid Measures

- Ingestion: wash mouth with water provided person is conscious. Call a physician or poison control.
- <u>Inhalation Exposure:</u> remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- <u>Skin Exposure:</u> immediately flush with copious amounts of water and wash with soap and water. Remove contaminated clothing and shoes. Call a physician if irritation or discomfort develops.
- <u>Eye Exposure:</u> flush the eyes with copious amounts of water for at least 15 minutes. Remove contact lenses if present and flush for at least 15 minutes. Do not re-insert contact lenses. Assure adequate flushing by separating eyelids with fingers. Call a physician.
- Most Important symptoms, acute and delayed: skin or tissue irritation; burns may be possible if response delayed.

5. Fire Fighting measures

• Dry chemical, foam, carbon dioxide, or water fire extinguisher.

Firefighting media should be selected depending on the surrounding materials and equipment. Ambient fire may liberate
hazardous vapors. It is recommended that firefighters wear protective gear and self-contained breathing apparatus to limit
their exposure.

6. Accidental Release Measures

Ventilate area. Wear appropriate protective gear. Use paper towels or chemical wicks to wipe up and pick-up spilled materials.
 Dispose of waste in accordance with federal, state, and local regulations. Avoid putting any component into drain or sewer systems. Wash spill site thoroughly with soap and water after material pick up is complete.

7. Handling and Storage

- Should only be handled and used by qualified, trained professionals. Wear protective eyewear, clothing, gloves and other gear whenever handling.
- Store at 4°C unless indicated otherwise on the product data sheet.

8. Exposure Controls/Personal Protection

- OSHA Permissible Exposure Level (PEL) information not available at the supplied concentrations.
- <u>Engineering Controls:</u> Use with adequate ventilation and illumination. Check that functional eyewash stations and safety showers are close to the workstation location.
- <u>Individual Protection Measures:</u> Wear suitable protective clothing and appropriate footwear as protection against splashing or contamination. Wear approved safety eyewear and protective gloves. General good laboratory hygiene should be maintained at all times. Wash hands before work breaks and on finishing the work.

9. Physical and Chemical Properties

- Physical State and Appearance:
- Appearance: green or clear liquid solution
- Solubility: soluble in water
- Odor: No data available
- Odor Threshold: No data available
- pH: No data at supplied concentration
- Flash point: No data at supplied concentration
- Melting point: No data at supplied concentration
- Boiling Point: No data at supplied concentration
- Boiling Range: No data available at supplied concentration
- Evaporation rate: No data at supplied concentration
- Flammability: No data at supplied concentration
- Upper/Lower Flammability: No data at supplied concentration
- Explosive Limits: No data at supplied concentration
- Vapor Pressure: No data at supplied concentration
- <u>Vapor Density:</u> No data at supplied concentration
- Relative Density: No data at supplied concentration
- Solubility: No data at supplied concentration
- Partition coefficient: n-octanol/water: No data at supplied concentration
- <u>Auto-ignition temperature:</u> No data at supplied concentration
- Decomposition Temperature: No data at supplied concentration
- <u>Viscosity:</u> No data at supplied concentration

10. Stability and Reactivity

- Reactivity: No data at supplied concentration
- Chemical Stability: stable until the expiration date indicated on the product label under the recommended storage conditions.
- <u>Hazardous Reactions:</u> No data at supplied concentration
- Conditions to avoid: No data at supplied concentration
- Incompatible Materials: No data at supplied concentration
- Hazardous decomposition products: No data at supplied concentration

11. Toxicological Information

- Acute toxicity
- Skin corrosion / irritation
- Serious eye damage / irritation
- Respiratory or skin sensitization

- No data at supplied concentration
 - May cause irritation
- No data at supplied concentration
 - No data at supplied concentration

Germ cell mutagenicityCarcinogenicity

Reproductive toxicity

Specific target organ toxicity (single exposure)

Specific target organ toxicity (repeated exposure)

Aspiration hazard

Symptoms / injuries after inhalation
Symptoms / injuries after skin contact
Symptoms / injuries after eye contact

· Symptoms / injuries after ingestion

No data at supplied concentration
 No data at supplied concentration
 No data at supplied concentration

No data at supplied concentration
No data at supplied concentration

No data at supplied concentration

May cause irritation
 May cause irritation
 May cause irritation
 May cause irritation

12. Ecological Information

- Toxicity: No data available at the mixtures' concentrations.
- Ecotoxicity: No data available at supplied concentration
- Persistence and degradability: No data available at supplied concentration
- Bioaccumulative potential: No data available at supplied concentration
- Mobility in soil: No data available at supplied concentration

13. Disposal Considerations

- Waste must be disposed according to federal, state, and local regulations.
- Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging should be disposed of in the same manner as unused product.

14. Transport Information

- No special transport regulations at the supplied concentration.
- UN # 3265
- UN Shipping name: corrosive liquid, acidic, organic, n.o.s.
- None of the ingredients are listed in SARA, TSCA
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

15. Regulatory Information

- No hazardous ingredient in an amount that requires identification and labeling in the supplied concentration.
- No hazardous ingredient in an amount that requires identification and labeling in the supplied concentration for SARA 302, SARA 313.
- Right to know: Pennsylvania, New Jersey,
- California: does not contain any chemicals subject to California Prop. 65 regulations,
- Analogous GHS-based global regulations. Chemical safety assessment: Mixtures covered in this SDS were classified
 using the EU Regulation 1272/2008/EC and/or UN.
- Regulation (EC) No. 1907/2006 (REACH): Chemical not included in the Candidate List of Substances of Very High Concern (SVHC).
- REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration.
- German water hazard class for 1 Appendix No. 4
- No chemical safety assessment has been performed for the product.

16. Other Information

Document Creation Date: December 20, 2019

Document Revision Date: N/A
 Description of Change(s): N/A

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 of this document, the recipient agrees to make every reasonable effort to prevent the unauthorized use and distribution of the proprietary
 information.

1. Substance Identification

- <u>Component:</u> Enzyme-antibody conjugate contains thimerosal.
- Company: Aviva Systems Biology Corp, 6370 Nancy Ridge Dr Ste 104, San Diego, CA 92121 USA., 858-552-6979, info@avivasysbio.com
- CAS Number: 54-64-8
- EC Index Number: 080-004-00-7
 EC List Number: 200-210-4
- REACH Registration Number: Not available or not required
- Product Use: Research Use Only. For In Vitro Use Only.
- Product Use advised against: NOT for Diagnostic Use. Not for Human or Animal Consumption.
- Emergency Phone Number: 911 if in USA. Use relevant local phone number if outside USA.

2. Hazard Identification

Hazard classification

Not dangerous at supplied concentration

3. Composition/Information on Ingredients

Kit Component	Ingredient	CAS#	EC Number	Index Number	Concentration in product mixture
Enzyme-antibody conjugate	Thimerosal	54-64-8	200-210-4	080-004-00-7	≤0.0025%, Not hazardous at this concentration

4. First Aid Measures

- Ingestion: wash mouth with water provided person is conscious. Call a physician or poison control.
- <u>Inhalation Exposure:</u> remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- <u>Skin Exposure:</u> immediately flush with copious amounts of water and wash with soap and water. Remove contaminated clothing and shoes. Call a physician if irritation or discomfort develops.
- <u>Eye Exposure:</u> flush the eyes with copious amounts of water for at least 15 minutes. Remove contact lenses if present and flush for at least 15 minutes. Do not re-insert contact lenses. Assure adequate flushing by separating eyelids with fingers. Call a physician.
- Most Important symptoms, acute and delayed: No data at supplied concentration.

5. Fire Fighting measures

- Dry chemical, foam, carbon dioxide, or water fire extinguisher.
- Firefighting media should be selected depending on the surrounding materials and equipment. Ambient fire may liberate hazardous vapors. It is recommended that firefighters wear protective gear and self-contained breathing apparatus to limit their exposure.

6. Accidental Release Measures

Ventilate area. Wear appropriate protective gear. Use paper towels or chemical wicks to wipe up and pick-up spilled materials.
 Dispose of waste in accordance with federal, state, and local regulations. Avoid putting any component into drain or sewer systems. Wash spill site thoroughly with soap and water after material pick up is complete.

7. Handling and Storage

- Should only be handled and used by qualified, trained professionals. Wear protective eyewear, clothing, gloves and other gear whenever handling.
- Store at 4°C unless indicated otherwise on the product data sheet.

8. Exposure Controls/Personal Protection

- OSHA Permissible Exposure Level (PEL) information not available at the supplied concentrations.
- <u>Engineering Controls:</u> Use with adequate ventilation and illumination. Check that functional eyewash stations and safety showers are close to the workstation location.

 Individual Protection Measures: Wear suitable protective clothing and appropriate footwear as protection against splashing or contamination. Wear approved safety eyewear and protective gloves. General good laboratory hygiene should be maintained at all times. Wash hands before work breaks and on finishing the work.

9. Physical and Chemical Properties

- Physical State and Appearance:
- Appearance: slightly brown liquid
- Solubility: No data at supplied concentration
- Odor: No data at supplied concentration
- Odor Threshold: No data at supplied concentration
- pH: No data at supplied concentration
- Flash point: No data at supplied concentration
- Melting point: No data at supplied concentration
- Boiling Point: No data at supplied concentration
- Boiling Range: No data at supplied concentration
- Evaporation rate: No data at supplied concentration
- Flammability: No data at supplied concentration
- <u>Upper/Lower Flammability:</u> No data at supplied concentration
- Explosive Limits: No data at supplied concentration
- <u>Vapor Pressure:</u> No data at supplied concentration
- Vapor Density: No data at supplied concentration
- Relative Density: No data at supplied concentration
- Solubility: No data at supplied concentration
- Partition coefficient: n-octanol/water: No data at supplied concentration
- Auto-ignition temperature: No data at supplied concentration
- Decomposition Temperature: No data at supplied concentration
- <u>Viscosity:</u> No data at supplied concentration

10. Stability and Reactivity

- Reactivity: No data at supplied concentration
- Chemical Stability: stable until the expiration date indicated on the product label under the recommended storage conditions.
- Hazardous Reactions: No data at supplied concentration
- Conditions to avoid: No data at supplied concentration
- <u>Incompatible Materials:</u> No data at supplied concentration
- Hazardous decomposition products: No data at supplied concentration

11. Toxicological Information

Acute toxicity No data at supplied concentration Skin corrosion / irritation No data at supplied concentration Serious eye damage / irritation No data at supplied concentration Respiratory or skin sensitization No data at supplied concentration Germ cell mutagenicity No data at supplied concentration Carcinogenicity No data at supplied concentration Reproductive toxicity No data at supplied concentration Specific target organ toxicity (single exposure) No data at supplied concentration Specific target organ toxicity (repeated exposure) No data at supplied concentration Aspiration hazard No data at supplied concentration Symptoms / injuries after inhalation No data at supplied concentration Symptoms / injuries after skin contact No data at supplied concentration Symptoms / injuries after eye contact No data at supplied concentration Symptoms / injuries after ingestion No data at supplied concentration

12. Ecological Information

- <u>Toxicity</u>: No data at supplied concentration
- Ecotoxicity: No data at supplied concentration
- Persistence and degradability: No data at supplied concentration
- Bioaccumulative potential: No data at supplied concentration
- Mobility in soil: No data at supplied concentration

13. Disposal Considerations

- Waste must be disposed according to federal, state, and local regulations.
- Contact a licensed professional waste disposal service to dispose of this material.
- Contaminated packaging should be disposed of in the same manner as unused product.

14. Transport Information

- No special transport regulations at the supplied concentration.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

15. Regulatory Information

- No hazardous ingredient in an amount that requires identification and labeling in the supplied concentration.
- REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration.
- No hazardous ingredient in an amount that requires identification and labeling in the supplied concentration for SARA 302, SARA 313.
- Right to know: Massachusetts, Pennsylvania, New Jersey,
- California: does not contain any chemicals subject to California Prop. 65 regulations,
- Regulation (EC) No. 1907/2006 (REACH): Chemical not included in the Candidate List of Substances of Very High Concern (SVHC).
- REACH No.: A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration.
- German water hazard class for 1 Appendix No. 4
- No chemical safety assessment has been performed for the product.

16. Other Information

Document Creation Date: December 20, 2019

Document Revision Date: N/A
 Description of Change(s): N/A

- The above information is believed to be correct but does not purport to be all-inclusive. This document is intended to be used only as a guide. It is incumbent on the user to read and fully understand the document prior to using the product or any of its components. Aviva Systems Biology Corp. shall not be liable or responsible in any way for use of either this information or the product supplied. Final determination of suitability and safe use of these materials is the sole responsibility of the user. Although a level of information has been made available, it is not a guarantee that no other hazards exist or will not appear during the use of the product and its components.
- It is incumbent on the user to know and or determine which local, regional, national and/or global regulations are relevant concerning use and/or transportation of the product and/or its components prior to the use or the shipment of the product and/or components. Although a level of information has been made available, it is not to be assumed that it is all inclusive.
- Disposal of waste may be subject to local, regional, national and/or global regulations. It is the responsibility of the user to dispose of the product and its components according to those regulations and laws.
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 information.

End of Section

1. Substance Identification

- Component: Calibrator contains sodium azide.
- Company: Aviva Systems Biology Corp, 6370 Nancy Ridge Dr Ste 104, San Diego, CA 92121 USA., 858-552-6979, info@avivasysbio.com
- CAS Number: 26628-22-8
- EC Index Number: 011-004-00-7
- EC List Number: 247-852-1
- REACH Registration Number: 01-2119457019-37-XXXX
- Product Use: Research Use Only. For In Vitro Use Only.
- Product Use advised against: NOT for Diagnostic Use. Not for Human or Animal Consumption.
- Emergency Phone Number: 911 if in USA. Use relevant local phone number if outwith USA.

2. Hazard Identification

Hazard classification - Not dangerous at supplied concentration

3. Composition/Information on Ingredients

Kit Component	Ingredient	CAS#	EC Number	Index Number	Concentration in
					product mixture

Calibrator	Sodium Azide	26628-22-8	247-852-1	011-004-00-7	≤0.025%, Not
					hazardous at this
					concentration

4. First Aid Measures

- <u>Ingestion:</u> wash mouth with water provided person is conscious. Call a physician or poison control.
- <u>Inhalation Exposure:</u> remove to fresh air. If not breathing, administer artificial respiration. If breathing is difficult, give oxygen. Call a physician.
- <u>Skin Exposure:</u> immediately flush with copious amounts of water and wash with soap and water. Remove contaminated clothing and shoes. Call a physician if irritation or discomfort develops.
- <u>Eye Exposure:</u> flush the eyes with copious amounts of water for at least 15 minutes. Remove contact lenses if present and flush for at least 15 minutes. Do not re-insert contact lenses. Assure adequate flushing by separating eyelids with fingers. Call a physician.
- Most Important symptoms, acute and delayed: No data at supplied concentration.

5. Fire Fighting measures

- Dry chemical, foam, carbon dioxide, or water fire extinguisher.
- Firefighting media should be selected depending on the surrounding materials and equipment. Ambient fire may liberate hazardous vapors. It is recommended that firefighters wear protective gear and self-contained breathing apparatus to limit their exposure.

6. Accidental Release Measures

Ventilate area. Wear appropriate protective gear. Use paper towels or chemical wicks to wipe up and pick-up spilled materials.
 Dispose of waste in accordance with federal, state, and local regulations. Avoid putting any component into drain or sewer systems. Wash spill site thoroughly with soap and water after material pick up is complete.

7. Handling and Storage

- Should only be handled and used by qualified, trained professionals. Wear protective eyewear, clothing, gloves and other gear whenever handling.
- Store at 4°C unless indicated otherwise on the product data sheet.

8. Exposure Controls/Personal Protection

- OSHA Permissible Exposure Level (PEL) information not available at the supplied concentrations.
- <u>Engineering Controls:</u> Use with adequate ventilation and illumination. Check that functional eyewash stations and safety showers are close to the workstation location.
- <u>Individual Protection Measures:</u> Wear suitable protective clothing and appropriate footwear as protection against splashing or contamination. Wear approved safety eyewear and protective gloves. General good laboratory hygiene should be maintained at all times. Wash hands before work breaks and on finishing the work.

9. Physical and Chemical Properties

- Physical State and Appearance:
- Appearance: clear liquid
- Solubility: No data at supplied concentration
- Odor: No data at supplied concentration
- Odor Threshold: No data at supplied concentration
- pH: No data at supplied concentration
- Flash point: No data at supplied concentration
- Melting point: No data at supplied concentration
- Boiling Point: No data at supplied concentration
- Boiling Range: No data at supplied concentration
- Evaporation rate: No data at supplied concentration
- Flammability: No data at supplied concentration
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- <u>Viscosity:</u> No data at supplied concentration

10. Stability and Reactivity

- Reactivity: No data at supplied concentration
- Chemical Stability: stable until the expiration date indicated on the product label under the recommended storage conditions.
- Hazardous Reactions: No data at supplied concentration
- Conditions to avoid: No data at supplied concentration
- Incompatible Materials: No data at supplied concentration
- Hazardous decomposition products: No data at supplied concentration

11. Toxicological Information

Acute toxicity No data at supplied concentration Skin corrosion / irritation No data at supplied concentration Serious eye damage / irritation No data at supplied concentration Respiratory or skin sensitization No data at supplied concentration Germ cell mutagenicity No data at supplied concentration Carcinogenicity No data at supplied concentration Reproductive toxicity No data at supplied concentration Specific target organ toxicity (single exposure) No data at supplied concentration Specific target organ toxicity (repeated exposure) No data at supplied concentration Aspiration hazard No data at supplied concentration Symptoms / injuries after inhalation No data at supplied concentration Symptoms / injuries after skin contact No data at supplied concentration Symptoms / injuries after eye contact No data at supplied concentration Symptoms / injuries after ingestion No data at supplied concentration

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- Ecotoxicity: No data at supplied concentration
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- Mobility in soil: No data at supplied concentration

13. Disposal Considerations

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14. Transport Information

- No special transport regulations at the supplied concentration.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

15. Regulatory Information

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End of SDS