

Aviva Systems Biology Corporation 10211 Pacific Mesa Blvd., Ste. 401 San Diego, CA 92121 Tel: 858-552-6979 Fax: 858-552-6975 Email: info@avivasysbio.com Web: www.avivasysbio.com

# SAFETY DATA SHEET

Version 4 Revision Date 8/22/2019

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name Sandwich ELISA

Catalog number OKAG00035

Recommended use Research use only

**Supplier Address** 

Aviva Systems Biology 10211 Pacific Mesa Blvd., Suite 401 San Diego, CA 92121 USA Tel: 1-858-552-6979/ 1-888-880-0001 Fax: 1-858-552-6975 tech@assaybiotech.com

Emergency telephone number: 911

# 2. HAZARDS IDENTIFICATION

#### **Potential hazards**

Some kit reagents are not considered to be hazardous according to 29CFR 1910.1200(d). They are mixtures that contain less than 1% hazardous chemicals and less than 0.1% carcinogenic chemicals. All potential hazards are listed below:

15x wash buffer: 0.3% Kathon CG/ICP (MCI & MI), 1.5% Tween-20.

Assay diluent: 0.2% Kathon CG/ICP (MCI & MI), 0.1% Tween-20.

**Ready-to-use substrate:** < 0.02% Hydrogen Peroxide and < 0.1% 3,3',5,5'-Tetramethylbenzidine (TMB).

Stop solution: 2N Sulfuric Acid (H2SO4).

# Classification of the substance or mixture

<u>Hydrogen peroxide:</u> Carcinogen; Corrosive; Flammable Oxidizer; Organ Damage (Eyes, Respiratory system, Skin); Toxic by ingestion.

<u>Kathon CG/ICP (MCI & MI)</u>: Carcinogen; Corrosive; Flammable Oxidizer; Harmful by ingestion; Harmful if inhaled and extremely destructive of tissues of mucous membranes

and upper respiratory tract; Organ Damage (Blood, Central Nervous System, Eye, Gastrointestinal tract, Kidney); Skin and respiratory sensitizer (causes allergies).

Sulfuric acid: Corrosive; Organ Damage (Eyes, Lungs, and Teeth).

<u>Tween-20</u>: Toxic by inhalation, ingestion, and skin absorption. May cause eye, skin, or respiratory system irritation.

# GHS label elements, including precautionary statements



# Hazard statements

Keep away from clothing and combustible materials. Avoid breathing the fumes and vapors from kit components. Wear protective gloves, clothing, eyewear, and face protection.

**Routes of entry**: Avoid ingestion and inhalation; avoid contact with skin and eyes. **Threshold limit value and source**: The chemical, physical and toxicological properties of these components have not been thoroughly investigated. Allergy-prone individuals should be particularly cautious with proteins or other materials of biological origin. **Carcinogenic effects data**: Not available

Chronic effects of overexposure: Not available

Solubility in water: Liquids except detergents are readily miscible in water.

Hazards not otherwise classified (HNOC) or not covered by GHS - none

# 3. COMPOSITION/INFORMATION ON INGREDIENTS CAS numbers/other identifiers

Chemical Name	CAS-No	Weight %
Tween-20	9005-64-5	1.6
Hydrogen peroxide	7722-84-1	0.02
Sulfuric acid	7664-93-9	<2
Methyl chloro isothiazolinone (MCI)	26172-55-4	<0.5%
Methyl isothiazolinone (MI)	2682-20-4	<0.5%

# 4. FIRST AID MEASURES

Eye contact

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.

# Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation

Move to fresh air

Ingestion

Clean mouth with water. Drink plenty of water.

**Notes to physician** Treat symptomatically.

# 5. FIREFIGHTING MEASURES

Flammable properties Not flammable

# Flash point

No determined

# Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

# **Explosion Data**

Sensitivity to mechanical impact None

# Sensitivity to static discharge

None

# Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

# 6. ACCIDENTAL RELEASE MEASURES

# Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

# **Environmental precautions**

Try to prevent the material from entering drains or water courses.

# Methods and materials for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Pick up and transfer to properly labeled containers.

# 7. HANDLING AND STORAGE

# Handling

Handle in accordance with good industrial hygiene and safety practice.

# Storage

Store the entire kit at 4°C upon arrival.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Exposure guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

#### **Engineering measures**

Showers Eyewash stations Ventilation systems

# Personal protective equipment

#### **Eye/face protection**

No special protective equipment required.

# **Skin protection**

No special protective equipment required.

#### **Body protection**

No special protective equipment required.

#### **Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

#### **Hygience measures**

Handle in accordance with good industrial hygiene and safety practice.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Odour Odour threshold pH Melting point/freezing point Initial boiling point and boiling range Flash point Evaporation rate Form: liquid No data available Flammability (solid, gas) Upper/lower flammability or explosive limits Vapour pressure Vapour density Relative density Water solubility Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties Oxidizing properties No data available No data available

# 10. STABILITY AND REACTIVITY

#### Stability

Stable under recommended storage conditions.

#### Incompatible products

None known based on information supplied.

#### **Conditions to avoid**

None known based on information supplied.

#### Hazardous decomposition products

None known based on information supplied.

# Hazardous polymerization

Hazardous polymerization does not occur.

#### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Inhalation: No data available Dermal: No data available

Skin corrosion/irritation No data available

# Serious eye damage/eye 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

# Aspiration hazard

No data available

# 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

The environmental impact of this product has not been fully investigated.

# 13. DISPOSAL CONSIDERATIONS

#### Waste treatment methods

#### Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

# **Contaminated packaging**

Dispose of as unused product.

# 14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

# ΙΑΤΑ

Not dangerous goods

# 15. **REGULATORY INFORMATION**

#### U.S. federal regulations

#### SARA 302/313 components

The following components are subject to reporting levels established by SARA Title III, Section 302/313:

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# SARA 311/312 hazard categories

Acute health hazard	no
Chronic health hazard	no
Fire hazard	no
Sudden release of pressure hazard	no
Reactive hazard	no

# Clean water act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

# CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

# **California proposition 65**

This product does not contain any Proposition 65 chemicals.

# 16. OTHER INFORMATION

# Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.