

MATERIAL SAFETY DATA SHEET (MSDS)

According to EC Directive 97/79/EC

1. Product Identification

Product Name: CA19-9 ELISA Kit

Catalog No.: OKBA00005

Supplier: Aviva Systems

Biology

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2. Composition/Information on Ingredients

Components	Main Ingredients	Composition
1. Coated Wells 96 well plate 12 × 8 strips	Mouse Monoclonal Anti-CA19-9 5 gm Desiccant	0.5 µg/well
2. Enzyme Conjugate Concentrate (12x) 1 x 1.1 ml vial	Mouse Monoclonal Anti-CA19-9 Conjugated to Horseradish Peroxidase Buffered Protein Solution ProClin-300	1 µg/ml 99% (v/v) 1% (v/v)
3. Enzyme Conjugate Diluent 1 x 13 ml bottle	0.1M Tris Buffer, pH = 7.6 * Bovine Serum ProClin-300	49.5% (v/v) 49.5% (v/v) 1% (v/v)
4. Reference Standards Liquid 0, 25, 75, 150, 300 and 600 U/ml	CA19-9 Antigen 0.015M Potassium Phosphate Buffer w/ 6% BSA Sodium Azide	0, 25, 75, 150, 300, and 600 U/ml 99.9% (v/v) 0.1% (w/v)
5. Assay Buffer 1 x 13 ml bottle	Phosphate Buffer, pH=7.4 BSA Sodium Azide	> 99% (v/v) 0.25% (w/v) 0.1% (w/v)
6. Wash Buffer (20x) 1 × 50 ml bottle	Potassium Phosphate Buffer Tween 20 Sodium Chloride	0.5 M 0.5% (v/v) 8.5% (w/v)
7. TMB Reagent 1 × 11 ml bottle	TMB Nonreducing Oligosaccharides Hydrogen Peroxide	≤ 0.05% (w/v) ≤ 3% (w/v) ≤ 0.02% (v/v)
8. Stop Solution 1 × 11 ml bottle	HCl D.I. H ₂ O	3.1% (v/v) 96.9% (v/v)

* All bovine products have been derived from animals of US origin and processed in USDA licensed facilities.

3. Hazard Ingredients

Kit Component(s): Reference Standards, Assay Buffer

<u>Hazardous Component</u>	<u>Percent</u>	<u>CAS Number</u>
Sodium Azide (NaN ₃)	0.1% (w/w)	26628-22-8
Human Serum	---	---

4. Hazard Identification

Sodium azide is a toxic substance. Avoid contact with components, which contain sodium azide, and do not ingest. An accumulation of sodium azide may result in a reaction with lead or copper plumbing to form an explosive metal azide complex. If drain disposed, dilute and flush with a copious amount of running water to prevent azide build-up. Sodium azide is dangerous when in contact with acid.

Human serum (or its components) used in the manufacture of components was found non-reactive for HIV-1 antibody, non-reactive for HBsAg, and non-reactive for HCV when tested with licensed agents. However, no known test method can offer absolute assurance that products derived from human serum will not be infectious. **Handle it as if capable of transmitting diseases.**

5. First Aid Measures

EYE CONTACT: Flush with copious amounts of fresh water for at least 15 minutes

SKIN CONTACT: Wash well with mild soap and copious amounts of fresh water. Remove any contaminated clothing. Flush skin surface with additional water.

INGESTION: Flush mouth with copious amounts of water. Do not swallow rinse water.

INHALATION: Remove victim to fresh air. If breathing is labored, administer oxygen as needed. If victim is not breathing, administer artificial respiration or CPR.

If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment.

6. Fire Extinguishing Measures

Use extinguishing media appropriate to surrounding fire.

7. Accidental Release Measures

Absorb spills of reagents and patient samples with absorbent paper, taking care not to spread the material. Clean spill area with a freshly made 0.5% sodium hypochlorite (bleach) solution. Discard all materials used to absorb spill and disinfect area into biohazard waste collection for proper disposal.

8. Handling and Storage

HANDLING: Do not eat, drink, smoke or apply cosmetics in laboratory areas. Do not pipette samples or reagents by mouth. Avoid splashing or aerosol formation. Use all reagents in accordance with the relevant package insert. Avoid high temperatures and keep from freezing during transport.

STORAGE: Store all reagents as directed in the relevant package insert.

9. Exposure Control/Personal Protection

Wear appropriate personal protective equipment, including lab coats and disposable gloves, when working with reagents or patient specimens. Avoid hand/mouth contact. Wash hands as soon as possible after handling reagents or patient samples.

Control Parameters of Hazardous Ingredients:

Sodium Azide: CAS#26628-22-8, RTECS#VY805000, TLV-Ceiling =0.3 mg/m³, NIOSH (the concentration of sodium azide in this well below the TLV shown above). Threshold limit value 1.0 ppm, TDLo (oral) 710 mcg/kg, female 3 mg/kg, LDLo (oral) 29 mg male, LDLo (oral) 786 mg female.

10. Physical and Chemical Properties

Physical State: Liquid	Color: Clear	Odor: None	pH: N/A
Boiling Point: 100°C	Melting Point: 0°C	Flash Point: N/A	Inflammability: N/A
Autoinflammability: N/A	Explosiveness: N/A	Oxidizing Properties: N/A	
Vapor Pressure: N/A	Relative Density: N/A	Solubility in water: Complete	

11. Stability & Reactivity

The reagents in the kit are stable under the storage conditions described in the package insert. Hazardous decomposition will not occur. There are no known strong incompatibilities.

12. Toxicological Information

Not applicable

13. Ecological Information

Not applicable

14. Disposal Guidelines

Dispose in accordance with applicable laws. If drain disposed, dilute and flush with copious amount of running water to prevent azide build-up (See Section 4).

15. Transport Information

Proper Shipping Name: in vitro diagnostic reagents

Hazard Class: None

Identification Number: None

16. Regulatory Information

Pursuant to U.S. OSHA regulations and EEC Directive Number 88/379, the only hazardous ingredients associated with this product are those listed in Section 3 above).

17. Other

The above information is believed to be correct to the best of our current knowledge. Aviva Systems Biology Corporation does not guarantee this to be all-inclusive and shall not be held liable for any damages resulting from handling of or contact with the above product.