



MATERIAL SAFETY DATA SHEET

Section 1 - IDENTITY OF THE MANUFACTURER AND PRODUCT

PRODUCT GROUP: Cardiac Marker ELISA Kits

PRODUCT IDENTITY: Myoglobin ELISA
Troponin I ELISA
hs-CRP ELISA

PRODUCT CODE #: 7030
PRODUCT CODE #: 7031
PRODUCT CODE #: 7033

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Section 2 - COMPOSITION AND INGREDIENT INFORMATION

Chemical Nature of the Preparation: Stable

Dangerous Substances in the Preparation: Hydrochloric Acid, Blood Components,
Tetramethylbenzidine and Urea peroxide.

Chemical	CAS#	EC #	Designation	% w/w
Hydrochloric Acid	7647-01-0	231-595-7	Corrosive	1.7 %
Blood Components	N/A	N/A	Potential Biohazard	99 %
ProClin-300	N/A	N/A	Corrosive	1.0 %
Tetramethylbenzidine	64285-73-0	264-769-6	Harmful	<0.1%
Hydrogen Peroxide	124-43-6	204-701-4	Oxidizing	<0.1%

Section 3 - HAZARDS IDENTIFICATION

Potential Biohazard:

Reference standards in Troponin I kits are formulated with a human serum base and with BSA in the Myoglobin and hs-CRP kits. The kit components that are made with human serum are tested by a United States Food and Drug Administration (USFDA) licensed method and found to be non-reactive for HIV-1, HIV-2, Hepatitis B surface antigen and HCV. Because no test method can offer absolute assurance that these agents are absent, reagents should be handled at the Biosafety Level 2, as recommended for any potentially infectious human blood product, in the United States Center for Disease Control (USCDC) and National Institute of Health (USNIH) manual "Biosafety in Microbiological Laboratories", 1988. All bovine serum products used are derived from animals of US origin, processed in USDA licensed facilities

Chemical Hazard:

Reference standards, enzyme conjugate and sample diluent (except Troponin I) in kits are formulated with ProClin-300 as a preservative. TMB Reagent contains tetramethylbenzidine and hydrogen peroxide. In case of contact with any of these reagents, wash thoroughly with water.

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Section 4 - FIRST AID MEASURES

- Skin Contact:** Remove contaminated clothing and wash the exposed skin area thoroughly with soap and water.
- Eye Contact:** Flush with copious amounts of water for at least 15 minutes. Seek medical attention.
- Inhalation:** Remove to fresh air, give oxygen if breathing becomes difficult and seek medical attention.
- Ingestion:** Flush mouth with copious amounts of water, provided that the person is conscious and seek medical attention.

Section 5 - FIRE AND EXPLOSION DATA
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- Suitable Extinguishing Media:** Chemical or water fire extinguisher.
- Extinguishing Media Not to be Used:** None known.
- Special Fire Fighting Procedures:** None Known.
- Unusual Fire and Explosion Hazards:** Calibrators and Conjugate in kits are formulated with Proclin-300 as a preservative. Stop solution is a caustic solution of dilute HCl.
- NFPA Rating:** Health: 3, Flammability: 0, Reactivity: 2 (for concentrated Hydrochloric Acid)

Section 6 - MEASURES IN CASE OF ACCIDENTAL SPILL

- Body Precautions:** Wear gloves, impermeable shoe covers and laboratory coat.
- Environmental Precautions:** Contain the spill to the smallest area possible.
- Cleaning Measures:** Take care not to contaminate body. Neutralize a Stop Solution spill with dilute base, then absorb the material with disposable towels. Soak a Calibrator spill area with a 10% bleach solution and wipe up with disposable towels. Dispose of all contaminated trash in accordance with local regulations.

Section 7 - HANDLING AND STORAGE

- Handling:** Wear suitable personal protective equipment. Take care not to splash, spill or splatter standards, stop solution or controls.
- Storage:** Store kit reagents in 2 - 8° C in refrigerators designated and labeled to contain human blood products.

Section 8 - EXPOSURE CONTROL AND PERSONAL PROTECTION

- Body Protection:** Wear laboratory coat.

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- Respiratory protection:** In case of fire, wear self-contained breathing apparatus.
- Hand Protection:** Wear non-permeable rubber, neoprene, latex or nitrile disposable gloves. Change gloves when they become contaminated.
- Eyes Protection:** Wear safety glasses or goggles when a splash hazard exists.
- Others:** None known.

Section 9 -	PHYSICAL AND CHEMICAL CHARACTERISTICS
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- Physical State:** Liquid.
- Color:** Conjugate – Red; Sample Diluent and Reference Standards – yellow to orange; all other reagents clear.
- Odor:** None detectable.
- pH:** 5.5 – 7.4 for all components except Stop Solution at <2 (highly acidic)
- Boiling Point:** Not applicable.
- Melting Point:** Not applicable.
- Flash Point:** Not applicable.
- Flammability:** Not Flammable.
- Auto flammability:** Will not occur.
- Vapor Pressure:** Not applicable.
- Relative Density:** 1-3 mg/ml
- Water Solubility:** 100% soluble.

Section 10 -	STABILITY AND REACTIVITY DATA
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- Stability:** Stable in Normal Conditions.
- Conditions to Avoid:** None known.
- Materials to Avoid:** None known.
- Hazardous Decomposition Products:** None Known.

Section 11 -	TOXICOLOGY INFORMATION
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Effects of Dangerous Substances at the Concentrations Present in the Preparation:

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Toxic Effects: Potential Biohazard.

Harmful Effects: Potential Biohazard.

Sensitizing Effects: None known.

Carcinogenic/Mutagenic/Teratogen Effects: None known.

Section 12 -	ECOLOGICAL INFORMATION
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None Known.

Section 13 -	DISPOSAL CONSIDERATIONS
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Disposal of Preparation Left: Dispose according to current regional and national rules.

Contaminated Containers: Dispose of following current regulations.

Section 14 -	TRANSPORTATION INFORMATION
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Road / Railway Haulage ADR/RID: Not restricted.
Sea Freight IMO (IMDG): Not restricted.
Air Freight IATA (ICAO): Not restricted.
UN Number: Not applicable.

Section 15 -	OTHER REGULATORY INFORMATION
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Classification: This preparation is classified and labeled according to EEC Directive n. 88/379.

Symbols of Danger: None.

"R" Phrases Indicating Specific Risks: R 34 / 37 – (for concentrated Hydrochloric Acid) Causes burns, irritating to respiratory system.

"S" Phrases Indicating Caution: S 26 / 36 / 37/ 39/ 45 – (for concentrated Hydrochloric Acid) In case of contact with eyes, rinse immediately with plenty of water and seek medical advise. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately.

Section 16 -	OTHER INFORMATION
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Recommended Use: For research or *in vitro* diagnostic use only. Not for use on or in humans and animals.

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