Safety Data Sheet

Revision Date: 13 October 2016

Product Name: DetectX® Hemoglobin Colorimetric Detection Kit

Section 1: Identification

Product Name: DetectX® Hemoglobin Colorimetric Detection Kit

Also known as: Catalog Number K013-H1

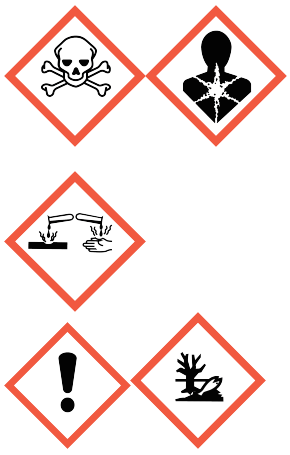
Manufacturer / Supplier
1514 Eisenhower Place
Ann Arbor, MI 48108-3284 Telephone 734-677-1774 (U.S.)
U.S.A. Fax 734-677-6860 (U.S.)

Recommended Use For Research Use Only

Section 2: Hazard(s) Identification

Classification: Regulation (EC) No. 1272/2008 [CLP/GHS]

Sodium Azide	Acute Oral Toxicity, Category 2 Acute Dermal Toxicity, Category 1 Specific Organ Toxicity, Category 2 Skin Sensitization, Category 1
Sodium Hydroxide	Serious eye damage, Category 1 Corrosive to metals, Category 1 Skin corrosion, Category 1B
Triton X-100	Acute oral toxicity, Category 4 Eye irritation, Category 2A Acute aquatic toxicity, Category 2 Chronic aquatic toxicity, Category 2



Hazard statements: Corrosive.

Causes burns by all exposure routes; eyes, skin, mucous membranes.

May be harmful if inhaled, absorbed through skin, swallowed. May be irritating to eyes, respiratory system and skin.

Contact with acids liberates toxic gas.

May react with lead and copper plumbing to form highly explosive metal azides.

Harmful to aquatic organisms.

May cause long-term adverse effects in aquatic environment.

Precautionary statements:	Keep away from heat, open flames, hot surfaces, sparks. Wash hands thoroughly after handling. Wear protective gloves, clothing, and eye/face protection. Avoid release to the environment.

Section 3: Information on Ingredients

Components: Hemoglobin Standard (C037-300UL)
Hemoglobin Detection Reagent (C038-20ML)
Hemoglobin Diluent (X052-50ML)

Description:	Chemical Name	CAS No.	Percent
Hemoglobin Standard, C037-300UL:	Sodium Azide	26628-22-8	≤ 0.09%
Hemoglobin Detection Reagent, C038-20ML:	Sodium Hydroxide	1310-73-2	≤ 1.0%
	Triton X-100	9002-93-1	≤ 5%
Hemoglobin Diluent, X052-50ML:	Sodium Azide	26628-22-8	≤ 0.09%

Additional components of the kit are non-hazardous or the specific chemical identity and/or exact percentage (concentration) of composition have been withheld as a trade secret.

Section 4: First-Aid Measures

Inhalation	If inhaled, remove to fresh air. Seek medical attention if any respiratory symptoms develop.
Skin Contact	Rinse with copious amounts of water and wash thoroughly with soap and water for 15 minutes. If irritation or discomfort develops seek medical attention.
Eye Contact	Rinse eyes with running water, checking for and removing contact lenses. Continue for at least 15 minutes. Seek medical attention.
Ingestion	If swallowed, wash out mouth with water if person is conscious. Seek medical attention.

Section 5: Fire-Fighting Measures

Extinguishing Media	Suitable: Carbon Dioxide, dry chemical powder, or appropriate foam.
Firefighting	Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

Cleanup Procedures	Wear appropriate protective clothing, Contain spill to prevent migration. Absorb spill with inert material, place in sealed container and hold for appropriate disposal. For blood spills, flood contaminated area with undiluted household bleach (5.5% sodium hypochlorite), then wipe clean. Wash area of spill with soap and water. Place blood-absorbent waste in biohazard bag for disposal.

Waste Disposal	Dispose of in accordance with federal, state, and local regulations.

Section 7: Handling and Storage

Handling	Avoid getting components of this kit on you or in you. Do not breathe vapor. Always wear appropriate protective clothing. Always wash hands and other exposed areas thoroughly after using this kit. Do not eat or drink while using this kit. Qualified and experienced professionals should only handle this kit.
Storage	Store according to the package insert instructions.

Section 8: Exposure Controls / Personal Protection

Engineering Controls	No special engineering controls are required when working with this kit. Use with adequate ventilation.
Protective Equipment	Safety glasses are recommended to prevent eye contact. Chemical resistant gloves and a lab coat should be worn to prevent skin contact.

Section 9: Physical and Chemical Properties

Characteristic	Stnd C037-300UL, Diluent X052-50ML (Sodium Azide, ≤ 0.09%)	Reagent C038-20ML (Sodium Hydroxide, ≤ 1%)	Reagent C038-20ML (Triton X-100, ≤ 5%)
Appearance	Clear, colorless liquid	Clear, colorless liquid	Clear, light yellow liquid
Odor	Slight	None	None
Boiling Point	N/A	100°C	> 200°C
Melting Point	N/A	N/A	6°C
Density	N/A	1.0	1.0700 g/cm^3
Vapor Pressure	N/A	14 mmHg	< 100 mmHg @ 20°C
Solubility in Water	Complete	Complete	Complete
pH	N/A	Alkaline	9.7

Section 10: Stability and Reactivity

Stability	This material is stable until the expiration date on the kit if stored as directed.
Conditions to Avoid	Heat, incompatibles
Incompatibilities	Strong oxidizing agents or acids. Sodium azide may react with lead and copper plumbing.

Section 11: Toxicological Information

Route of Exposure	
Skin Contact	May cause skin irritation.
Skin Absorption	May be harmful if absorbed through the skin.
Eye Contact	May cause eye irritation.
Inhalation	May be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion	Harmful if swallowed.
Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

Toxicity:	
Sodium Azide:	LD50 oral: 27 mg/kg (rat); LD50 skin: 20 mg/kg (rabbit) LD50: 4.2 mg/L/96 hr (Daphnia pulex), 0.8-1.6 mg/L/96 hr (Rainbow trout)
Triton X-100:	LD50 oral: 1,800 mg/kg (rat); LD50 skin: 8,000 mg/kg (rabbit) LC50: 8.9 mg/L/96 hr (Pimephales promelas), 26 mg/L/48 hr (Daphnia)
Algae:	ED50 – Pseudokirchneriella subcapitata (green algae) – 17g/L, 72h
Persistence / degradability:	
Sodium Hydroxide:	Readily degradable in the environment. Not bioaccumulative.
Triton X-100:	36% - Not readily biodegradable.
Mobility in soil:	No data available.
Results of PBT/vPvB assessment:	No data available.
Other adverse effects:	Toxic to aquatic life with long lasting effects.

Section 13: Disposal Considerations

Dispose of waste materials, unused components and contaminated packaging in compliance with country, state, district and local regulations. If unsure of the applicable requirements, contact the authorities for information. Solutions containing human-sourced materials should be handled as if potentially infectious. Use safe laboratory procedures in compliance with the Federal Bloodborne Pathogens Standard (29 CFR Part 1910.1030 December 1991).

Section 14: Transport Information

U.S. and Canadian Transportation; DOT

Proper Shipping Name	Chemical Kits
UN Identification Number	3316
Class and Description	9, Miscellaneous
Packing Group	N/A
Hazard Label	Class 9

International Air Transportation (IATA)

Proper Shipping Name	Chemical Kits
UN Identification Number	3316
Class and Description	9, Miscellaneous
Packing Group	III
Hazard Label	Class 9

Section 15: Regulatory Information

Product related information

The product is not subject to classification according to the sources of literature known to us.

Observe general safety regulations when handling chemicals.

Safety Statements

Avoid release to the environment.

Risk Statements

Contains human blood. Harmful if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

U.S. Regulatory Information

Sara Listed: Yes. The sodium azide (CAS# 26628-22-8) contained in this product is subject to SARA 313 Reporting requirements.

Section 16: Other Information

Disclaimer: For Research Use Only. Not for diagnostic, therapeutic, or other uses.

Further Information: The information contained in this document is accurate to the best of our knowledge and is provided in good faith. This document is intended only as a guide to the appropriate precautionary handling of the materials contained in this kit by properly trained personnel using this kit. Final determination or suitability of any materials is the sole responsibility of the user. Arbor Assays shall not be held liable for any damage resulting from use or handling of this product.