



Safety Data Sheet

Revision Date: 25 September 2023

Product Name: DetectX[®] Alkaline Phosphatase Colorimetric Activity Kit

Section 1: Identification

Product Name: DetectX[®] Alkaline Phosphatase Colorimetric Activity Kit
Also known as: Catalog Number K082-H1
Manufacturer / Supplier: Arbor Assays
1514 Eisenhower Place
Ann Arbor, MI 48108-3284 U.S.A. Telephone 734-677-1774 (U.S.)
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
Sodium Phosphate	Acute Dermal Toxicity, Category 1 Specific Organ Toxicity, Category 2
Diethanolamine	Skin Sensitization, Category 1 Skin irritation, Class 2 Eye irritation, Class 2A



Hazard statements: Corrosive, Caustic.
May be harmful if inhaled, absorbed through skin, swallowed. May be irritating to eyes, respiratory system, and skin.
May react with lead and copper plumbing to form highly explosive metal azides.

Precautionary statements: Wash hands thoroughly after handling.
Wear protective gloves, clothing, and eye/face protection.
Avoid release to the environment.

Section 3: Information on Ingredients

Components: Alkaline Phosphatase Standard (C294-50UL)
 p-NPP Substrate (X156-11ML)
 Assay Buffer Concentrate (X155-28ML)
 Stop solution (X158-6ML)

Description:	<u>Chemical Name</u>	<u>CAS No.</u>	<u>Percent</u>
Stop solution X158:	Sodium Azide	26628-22-8	≤ 0.09%
	Sodium phosphate tribasic	10101-89-0	≤ 3.81%
p-NPP Substrate X156:	Diethanolamine	111-42-2	≤ 10.0%

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.
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

<u>Characteristic</u>	TSP stop solution X158, (Sodium phosphate tribasic, 3.81%)	TSP stop solution X158, (Sodium Azide, ≤ 0.09%)	p-NPP Substrate X156, (DEA buffered)
Appearance	Clear, colorless liquid	Clear, colorless liquid	Clear to pale yellow liquid
Odor	None	None	Minimal odor
Boiling Point	100°C	100°C	N/A
Melting Point	N/A	N/A	N/A
Density	1.0	N/A	N/A
Vapor Pressure	14 mmHg	N/A	N/A
Solubility in Water	285 g/l at 20 °C (68 °F)	Complete	Complete
pH	12.5	N/A	9.0

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 InformationRoute 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 InformationToxicity:

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)

Persistence / degradability:

Sodium Azide: Soluble in water. Persistence is unlikely based on information.
Sodium Phosphate: Readily degradable in the environment. Not bioaccumulative.
tribasic

Mobility in soil: No data available.

Results of PBT/vPvB No data available.

assessment:

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 InformationU.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 InformationProduct 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

Harmful if swallowed.

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.