



ARBOR
ASSAYS

Safety Data Sheet

Revision Date: 2 March 2025

Product Name: DetectX® BCA Colorimetric Detection Kit

Section 1: Product and Company Identification

Product Name	DetectX® BCA Colorimetric Detection Kit		
Also Known as:	Catalog Number K041-H1		
Catalog Number			
Manufacturer / Supplier	Arbor Assays		Telephone 734-677-1774
	1143 Highland Dr, Ste A		
	Ann Arbor, MI 48108-5001		
	USA		

Recommended Use: For Research Use Only

Section 2: Chemical Component Information

List of Components	BSA Standard (C143-200UL) BCA Reagent (C144-16ML) BCA Enhancer (C145-320UL)			
Hazardous Ingredients				
<u>Chemical Name</u>	<u>CAS #</u>	<u>Kit Component</u>	<u>Percent</u>	<u>SARA 313</u>
Sodium Azide	26628-22-8	C143-200UL (Standard)	≤ 0.09%	Yes
Sodium Carbonate	497-19-8	C144-16ML (Reagent)	≥ 1.0%	No
Copper Sulfate, Pentahydrate	7758-99-8	C145-320UL (Enhancer)	≥ 1.0%	Yes
Information on other specific chemicals of this kit is being withheld as a trade secret of the manufacturer.				

Section 3: Health Hazards

Emergency Overview It is recommended that personnel wear safety goggles, gloves and protective clothing at all times. As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical components of this kit and ensure prompt removal from skin, eye, and clothing.

Sodium Azide Harmful if inhaled, absorbed through skin or swallowed. Contact with acids liberates toxic gas. Irritating to eyes, respiratory system and skin. Harmful to aquatic organisms, may cause long-term adverse effects in aquatic environment. May react with lead and copper plumbing to form highly explosive metal azides.

Sodium Carbonate Harmful if inhaled. Contact with decomposition products may cause delayed symptoms. Irritating to eyes, respiratory system and skin.

Copper Sulfate Harmful if ingested. Irritating to eyes, respiratory system and skin. May cause allergic skin reaction once sensitized.

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. Do not induce vomiting. Seek medical attention.

Section 5: Fire Fighting Measures

<u>Characteristic</u>	<u>C143-200UL</u> <u>(Sodium Azide,</u> <u>≤ 0.09%)</u>	<u>C144-16ML</u> <u>(Sodium Carbonate,</u> <u>≥ 1%)</u>	<u>C145-320UL</u> <u>(Copper Sulfate</u> <u>Pentahydrate, ≥ 1%)</u>
Flash Point	N/A	N/A	N/A
Explosion Limits	N/A	N/A	N/A
Auto-ignition Temp	N/A	N/A	N/A
Flammability	N/A	N/A	N/A
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. 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 and 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>	<u>C143-200UL (Sodium Azide, ≤ 0.09%)</u>	<u>C144-16ML (Sodium Carbonate, ≥ 1%)</u>	<u>C145-320UL (Copper Sulfate Pentahydrate, ≥ 1%)</u>
Appearance	Clear, colorless liquid	Clear, colorless liquid	Clear, blue colored liquid
Odor	Slight	None	None
Boiling Point	N/A	1,633°C	150°C
Melting Point	N/A	851°C	110°C
Density	N/A	2.54	2.284
Vapor Pressure	N/A	N/A	7.3mm Hg @ 25°C
Solubility in Water	Complete	Complete	Complete
pH	N/A	Alkaline	N/A

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
Incompatibles	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

No data is available.

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.

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, Sodium Azide (CAS# 26628-22-8) and Copper Sulfate (CAS# 7758-99-8) contained in this product are 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. ArborAssays shall not be held liable for any damage resulting from use or handling of this product.