



ARBOR
ASSAYS

Safety Data Sheet

Revision Date: 2 March 2025

Product Name: DetectX® Urea Nitrogen Colorimetric Detection Kit

Section 1: Identification

Product Name: DetectX® Urea Nitrogen Colorimetric Detection Kit
Also known as: Catalog Numbers K024-H1, K024-H5, or BUN Detection Kit
Manufacturer / Supplier: Arbor Assays
1143 Highland Dr, Ste A
Ann Arbor, MI 48108-5001 Telephone 734-677-1774 (U.S.)
U.S.A.
Recommended Use: For Research Use Only

Section 2: Hazard(s) Identification

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

Sulfuric Acid: Skin Corrosion, Category 1B
Serious Eye Damage, Category 1
Target Organ Toxicity, Category 3



Hazard statements: Causes severe skin burns and eye damage.
May cause respiratory irritation.

Precautionary statements: Wash hands thoroughly after handling.
Wear protective gloves, clothing, and eye/face protection.
Do not breathe vapors.

Section 3: Information on Ingredients

Components: Urea Nitrate Standard (C089-250UL, C089-1ML)
Color Reagent A (X094-15ML, X094-38ML 2 each)
Color Reagent B (X095-15ML, X095-38ML 2 each)

Description: Color Reagent A, X094, and Color Reagent B, X095, contain:

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Percent</u>
Sulfuric Acid	7664-93-9	< 20.0%

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. Remove contaminated clothing and shoes. 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. Assure adequate flushing by separating the eyelids with fingers. 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: Water spray. 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.
	Specific Hazard(s): Emits toxic fumes under fires conditions.

Section 6: Accidental Release Measures

Cleanup Procedures	Wear appropriate protective clothing. Ventilate area. Contain spill to prevent migration. Absorb on sand or vermiculite, place in sealed container for disposal. Wash area of spill with soap and water.
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>	Color Reagent A, X094, Color Reagent B, X095, (Sulfuric Acid, < 20.0%)
Appearance	Clear, colorless liquid
Odor	Pungent
Boiling Point	100°C
Melting Point	0°C
Density	Essentially the same as water
Vapor Pressure	Essentially the same as water
Solubility in Water	Complete
pH	< 1.0

Section 10: Stability and Reactivity

Stability	This material is stable until the expiration date on the kit if stored as directed.
Hazardous Decomposition Products	Sulfur oxides and hydrogen.
Incompatibilities	Materials such as common metals, strong bases, cyanides, acetone, and nitric acid.

Section 11: Toxicological Information

<u>Route of Exposure</u>	
Skin Contact	May cause skin irritation and/or burns. Oral LD50-rat 2140 mg/kg.
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. Inhalation LC50-rat 510 mg/L/2H.
Ingestion	Harmful if swallowed.
<u>Symptoms of Exposure</u>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

LC50 Freshwater Fish- 42 mg/L/96H; EC50 Water Flea- 29 mg/L/24H.

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 InformationU.S. and Canadian Transportation; DOT

Proper Shipping Name	Chemical Kits
UN Identification Number	2796
Class and Description	8, Miscellaneous
Packing Group	N/A
Hazard Label	Class 8

International Air Transportation (IATA)

Proper Shipping Name	Chemical Kits
UN Identification Number	2796
Class and Description	8, Miscellaneous
Packing Group	II
Hazard Label	Class 8

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. (Sulfuric Acid; X094, X095).

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.