

Material Safety Data Sheet

UIBC Assay Kit
(Bathophenanthroline Chromogenic method)

Revision Number: 2.3

Last updated 12/11/2025

1. Product and Company Identification

Product Name: UIBC Assay Kit
Catalog Number: UIB02AE
Manufacturer/Supplier: Cellspect Co., Ltd.
2-4-23, Kitaiioka, Morioka-shi, Iwate, 020-0857, Japan
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Components

Item Number	Name	Quantity
UIB02AE	R-A Buffer	● 40 mL
	R-R Chelate color	● 6 mL

2. Hazards Identification

Mixture of the following substances with non-hazardous additions:

R-A

GHS classification: Not classified

Label elements: None

R-R

GHS classification: Not classified

Label elements: None

Signal word: Warning

Hazard statement: H402 – Harmful to aquatic life.

Precautionary statements:

P273 – Avoid release to the environment.

P501 – Dispose of contents/container in accordance with local regulations.

3. Composition/Information on Ingredients

R-A Buffer

Citric Acid Monohydrate (CAS#:5949-29-1)	<0.5%
Glycine (CAS#:56-40-6)	<4.0%
Ammonium iron (III) sulfate 12-water (CAS#:7783-83-7)	<0.01%

R-R Chelate color

L-Ascorbic Acid Sodium Salt (CAS#:134-03-2)	<1.0%
Potassium Pyrosulfite (CAS#:16731-55-8)	<0.5%
Octylphenoxypolyethoxyethanol (CAS#:9002-93-1)	<1.0%
Glycine (CAS#:56-40-6)	<1.0%
4, 7-Diphenyl-1, 10-phenanthroline disulfonic acid, disodium salt (CAS#:98645-86-4)	<0.5%

4. First Aid Measures

If eye or skin contact occurs, immediately wash affected area with soap and copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician to seek medical advice.

If swallowed, wash out mouth with water provided person is conscious and call a physician to seek medical advice.

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If swallowed, wash out mouth with water provided person is conscious and call a physician to seek medical advice.

If inhaled, move individual to fresh air and call physician to seek medical advice.

5. Fire Fighting Measures

Explosion Hazards:	Not available
Flash Point:	Not available
Autoignition Temperature:	Not available
Flammability:	Not available
Extinguishing media:	Water spray, carbon dioxide, dry chemical powder or appropriate foam
Firefighting:	Wear self-contained breathing apparatus and protective clothing to prevent with skin and eyes.

6. Accidental Release Measures

Use appropriate protective equipment and methods to clean up spilled substances promptly. Absorb spill onto an appropriate material. Collect and dispose of all waste in accordance with applicable laws.

7. Handling and Storage

Keep receptacles tightly sealed.
Store Reagent, Standard in a cool and dark space (2-8°C).

8. Exposure Controls / Personal Protection

Keep away from foodstuffs and beverages. Wash your hands before and after the work. Wear appropriate gloves, protective clothing and eyewear and follow safe laboratory practices.

9. Physical and Chemical Properties

R-A Buffer
Appearance: Clear liquid
pH: < 9
Relative Density: ~1.02
Solubility: Soluble in water
Flash Point: Not applicable (aqueous solution)
Odor: Odorless

R-R Chelate color

Appearance: Clear liquid
pH: <5
Relative Density: ~1.02
Solubility: Soluble in water
Flash Point: Not applicable (aqueous solution)

10.Stability and Reactivity

Thermal Decomposition : no decomposition if used according to specifications.
Dangerous Products of Decomposition : Carbon oxides. Carbon dioxide. Nitrogen oxide. Sulfur oxide.
Dangerous Reactions: none

11.Toxicological Information

Inhalation: Harmful if inhaled
Ingestion: Harmful if swallowed
Skin: Causes skin irritation
Eyes: Causes eye irritation
Target Organs/ Chronic Exposures: Not available

12.Ecological Information

Not classified as hazardous to aquatic environment at the present concentrations.
Avoid release to the environment.

13.Disposal Considerations

Small quantities may be diluted with water and discharged according to local regulations.
Dispose of containers as chemical waste in accordance with applicable laws.

14.Transport Information

UN Number: Not applicable
Transport Hazard Class: Not classified
Packing Group: Not applicable
Special Precautions: Prevent tipping or leakage during transport.

15.Regulatory Information

United States Classification and Label Text:
United States Regulatory Information:
SARA Listed: NO.

16.Other Information

This material is sold for research purposes only. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as guide. Users should make independent decisions regarding completeness of the information based on all sources available. This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Cellspect shall not be held liable for any damage resulting from handling or from contact with the above product.

*Metallogenics™ is the name of reagent kit from Cellspect Co., Ltd.