



Material Safety Data Sheet

1. Product Identification

Product Name: **Protein Carbonyl Assay Kit**

Manufacturer: Redox Innovation

2 Riccarton Avenue

University of Otago, Christchurch

Christchurch

New Zealand

Email: info@redoxinnovation.co.nz

2. Components

Name	Quantity
96-well microtitre plate	1
Plate seal	1
EIA buffer powder	9.57 g
Blocking agent	150 µL
Biotin hydrazide	10 mg
Guanidine hydrochloride reagent	20 mL
Streptavidin-HRP	10 µL
Chromogen reagent	20 mL
Stopping agent	12 mL
Oxidised protein standards (6)	6 x 1 mg
Carbonyl control sample	1 mg

3. Hazards

It is recommended that all laboratory personnel follow standard safety procedures when handling this product. Safety procedures should include wearing eye protection, gloves and protective clothing. Direct physical contact with all components in this product should be avoided.



Known hazardous components

Name	CAS #	Percentage
Potassium di-hydrogen phosphate (EIA buffer powder)	7778-77-0	14% (w/w)
Guanidine hydrochloride (Guanidine hydrochloride reagent)	50-01-1	57% (w/v)
Potassium hydroxide (Guanidine hydrochloride reagent)	1310-58-3	2% (w/v)
Phosphoric acid (Guanidine hydrochloride reagent)	7664-38-2	3% (w/v)
Biotin hydrazide	66640-86-6	100% (w/w)
Reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (Streptavidin-HRP)	55965-84-9	0.005-0.0125% (w/v)
Sulfuric acid (Stopping agent)	7664-93-9	14% (v/v)

The remaining components are classified as non-hazardous due to their nature and/or concentration in solution.

Danger! Some components of this kit contain materials which

- are corrosive
- can cause burns or irritation to skin, eyes, respiratory and gastrointestinal tracts
- are damaging to all body tissues
- are harmful if inhaled.

Potential Health Effects

Inhalation: Irritation to respiratory tract. Symptoms include coughing, shortness of breath.

Ingestion: Toxic. Corrosive to mucous membranes. General gastrointestinal upset can be expected.



Skin contact: Burns or irritation to skin. Symptoms include redness, itching, pain.

Eye contact: Irritation, possibly corrosive to eye tissues. Tearing, redness, pain are symptoms.

4. First Aid Measures

Skin contact: Immediately flush with plenty of water.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. Seek medical attention.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention.

Ingestion: Do Not Induce Vomiting! Give large amounts of water, immediately get medical attention.

5. Fire Fighting Measures

Not considered to be a fire or explosive hazard.

Precautions during fire: Avoid inhalation of fumes. Move container from fire area if possible.

Fire extinguishing media: Use any means suitable for extinguishing surrounding fire.

6. Accidental Release Measures

Ventilate area. Wipe or pick up materials, place in sealed container and dispose of in accordance with regulations. Wash spill area with soap and water after material pick up is complete.



7. Handling and Storage

This kit should only be handled and used by trained personnel, using eye protection and protective clothing and gloves, following Good Laboratory Practice.

This kit should be stored as recommended on the product leaflet. All components should be kept in tightly closed containers.

8. Exposure Controls / Personal Protection

Refer to Sections 6 and 7.

9. Stability and Reactivity

Stability: The kit components are stable until the expiration date indicated on the label under the specified storage conditions.

Reactivity: There are no known reactivities with these components.

10. Toxicological Information

Contains toxic materials. Harmful by ingestion, inhalation and skin exposure.

No known carcinogenic effects.

11. Ecological Information

None available.

12. Disposal Considerations

Must be disposed of in accordance with local environmental control regulations.



13. Transport Information

The product is not classified as dangerous goods for carriage by land or air transport.

IATA labelling requirements: None

14. Regulatory Information

Non-regulated product

Listing of components on individual country Chemical Inventories: Listed or exempt

15. Other Information

For Research Use only.

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The above information does not purport to be all-inclusive and should be used as a guide.