

## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** **PROTEIN REAGENT 1**

**Recommended Use of the Chemical and Restrictions on Use** Reagent for protein analysis.

**Supplier:** Ixom Operations Pty Ltd (Incorporated in Australia)  
**NZBN:** 9429041465226  
**Street Address:** 166 Totara Street  
Mt Maunganui South  
New Zealand

**Telephone Number:** +64 9 368 2700  
**Facsimile:** +64 9 368 2710  
**Emergency Telephone:** **0 800 734 607 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

**SIGNAL WORD:** WARNING

**Subclasses:**

Subclass 6.1 Category E - Substances which are acutely toxic.  
Subclass 6.3 Category A - Substances that are irritating to the skin.  
Subclass 6.4 Category A - Substances that are irritating to the eye.  
Subclass 9.1 Category B - Substances that are ecotoxic in the aquatic environment.

Laboratory Chemicals and Reagent Kits Group Standard 2017  
Approval Number: HSR002596



**Hazard Statement(s):**

H303 May be harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H411 Toxic to aquatic life with long lasting effects.

**Precautionary Statement(s):**

**Prevention:**

P102 Keep out of reach of children.  
P103 Read label before use.  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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## Response:

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment (see First Aid Measures on the Safety Data Sheet).

P332+P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing before re-use.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P391 Collect spillage.

## Storage:

No storage statements.

## Disposal:

P501 In case of a substance that is in compliance with a HSNO approval other than a Part 6A (Group Standards) approval, a label must provide a description of one or more appropriate and achievable methods for the disposal of a substance in accordance with the Hazardous Substances (Disposal) Notice 2017. This may also include any method of disposal that must be avoided.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Sodium hydroxide	1310-73-2	<1%	H290 H314 H318
Copper (II) sulfate	7758-98-7	<1%	H302 H319 H315 H400 H410
Ingredients determined not to be hazardous	-	to 100%	-

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

### Inhalation:

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

### Skin Contact:

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

### Eye Contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.

### Ingestion:

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek medical advice.

### Indication of immediate medical attention and special treatment needed:

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

### Suitable Extinguishing Media:

Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.

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Substance No: 000000053505

Issued: 15/01/2018

Version: 1

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**Hazchem or Emergency Action Code:** 3Z

**Specific hazards arising from the chemical:**

Non-combustible material. Environmentally hazardous.

**Special protective equipment and precautions for fire-fighters:**

Not combustible, however following evaporation of the water component of the material, the residual material can burn if ignited. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

## 6. ACCIDENTAL RELEASE MEASURES

**Emergency procedures/Environmental precautions:**

Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

**Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:**

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling:** Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children. Wash hands thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Store in a cool, dry, well ventilated place. Store between 2°C and 8°C. Keep containers closed when not in use - check regularly for leaks.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Workplace Exposure Standards:** No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for constituent(s):

Sodium hydroxide: Ceiling 2 mg/m<sup>3</sup>

As published by the New Zealand Workplace Health & Safety Authority.

WES - Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded during any part of the working day.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

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## Appropriate engineering controls:

Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

## Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.



Wear overalls, chemical goggles and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Liquid
<b>Colour:</b>	Blue
<b>Odour:</b>	Odourless
<b>Odour Threshold:</b>	Not applicable
<b>Solubility:</b>	Miscible with water.
<b>Specific Gravity:</b>	1.02 @20°C
<b>Relative Vapour Density (air=1):</b>	Not available
<b>Vapour Pressure (20 °C):</b>	Not available
<b>Flash Point (°C):</b>	Not applicable
<b>Flammability Limits (%):</b>	Not applicable
<b>Autoignition Temperature (°C):</b>	Not applicable
<b>Boiling Point/Range (°C):</b>	Not available
<b>Decomposition Point (°C):</b>	Not available
<b>pH:</b>	13.2 @20°C

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	No information available.
<b>Chemical stability:</b>	Stable at ambient temperatures.
<b>Possibility of hazardous reactions:</b>	None known.

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**Conditions to avoid:** None known.  
**Incompatible materials:** None known.  
**Hazardous decomposition products:** None known.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:** Swallowing can result in nausea, vomiting, diarrhoea, and abdominal pain.  
**Eye contact:** An eye irritant.  
**Skin contact:** Contact with skin will result in irritation.  
**Inhalation:** Breathing in mists or aerosols may produce respiratory irritation.

**Acute toxicity:** No LD50 data available for the product.

**Chronic effects:** No information available for the product.

**Aspiration hazard:** No information available.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.  
**Persistence/degradability:** No information available.  
**Bioaccumulative potential:** No information available.  
**Mobility in soil:** No information available.  
**Aquatic toxicity:** Toxic to aquatic organisms. May cause long lasting harmful effects to aquatic life.  
48hr EC50 (Daphnia magna): 0.02 mg/L (for Copper sulphate)

## 13. DISPOSAL CONSIDERATIONS

### Disposal methods:

Refer to local government authority for disposal recommendations. Dispose of contents/container in accordance with local/regional/national/international regulations.

## 14. TRANSPORT INFORMATION

### Road and Rail Transport

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.



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Version: 1

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**UN No:** 3082  
**Transport Hazard Class:** 9 Miscellaneous Dangerous Goods  
**Packing Group:** III  
**Proper Shipping Name or Technical Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS COPPER SULFATE)  
**Hazchem or Emergency Action Code:** 3Z

## Marine Transport

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN No:** 3082  
**Transport Hazard Class:** 9 Miscellaneous Dangerous Goods  
**Packing Group:** III  
**Proper Shipping Name or Technical Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS COPPER SULFATE)

**IMDG EMS Fire:** F-A  
**IMDG EMS Spill:** S-F

## Air Transport

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

**UN No:** 3082  
**Transport Hazard Class:** 9 Miscellaneous Dangerous Goods  
**Packing Group:** III  
**Proper Shipping Name or Technical Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS COPPER SULFATE)

## 15. REGULATORY INFORMATION

### Classification:

Classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 and the Hazardous Substances (Classification) Notice 2017.

### Subclasses:

Subclass 6.1 Category E - Substances which are acutely toxic.  
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## 16. OTHER INFORMATION

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Supplier Safety Data Sheet; 09/ 2013.

## **Reason(s) for Issue:**

First Issue Primary SDS

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.