


1. Identification

Product Code 1111611

Product Name **BIURET REAGENT**

CAS Number **Mixture**

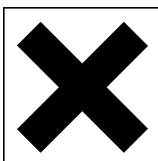
Supplier: **CAMLAB LIMITED**

**Norman Way Industrial Estate
 Over
 Cambridge
 England
 CB4 5WE**

Phone 01954 233110
 Fax 01954 233101

Emergency Telephone 08:00–17:00 01954 233110
 24hr 112
 (Have this document to hand)

2. Composition

Component	CAS No	EEC No	Conc w/w	Classification & Risk Phrases	Exp (See 8.1)
Sodium hydroxide	1310-73-2	215-185-5	0.8%	Xi : R35	WEL
Cupric sulphate	7758-98-7	231-847-6	0.5%	Xi : R22,R36/38,R50/53	N/A

3. Hazards Identification

Irritating to eyes and skin.

4. First Aid Measures

Eyes Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION URGENTLY.

Skin Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. If irritation persists or there is any sign of skin damage, seek IMMEDIATE MEDICAL ASSISTANCE

Inhalation Remove from exposure.

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.

5. Fire Fighting Measures

Hazards Presents no specific fire danger.

Extinguishing Media Consider what other flammable materials are present and act accordingly.

Unsuitable Media Nothing specified.

6. Accidental Release Measures

Personal Protection Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so.

Environmental Keep non-neutralised material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6. Accidental Release Measures (continued)

Major Spillage	Contain spill with inert material. Neutralise with 5M hydrochloric acid. Wash area down with copious amounts of water.
Minor Spillage	Wash area down with copious amounts of water.

7. Storage & Handling

Handling Precautions	Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing. Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.
Storage Conditions	Store in a dry place protected against moisture and water. Keep well separated from acids, metals, explosives, organic peroxides and ignitable materials.

8.1 Workplace Exposure Limits

Component	CAS No	Workplace Exposure Limits				Maximum Exposure Limits			
		Long Term		Short Term		Long Term		Short Term	
		ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³	ppm	mg m ⁻³
Sodium hydroxide	1310-73-2	-	-	-	2.000	-	-	-	-
Cupric sulphate	7758-98-7	No prescribed exposure limits				available			

8.2 Personal Protection

Respiratory	In cases where a spray or mist may be formed, use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.
Hands	Use nitrile gloves or PVC gauntlets.
Eyes	Use chemical full face shield.
Skin	If skin contact or contamination of clothing is likely, protective clothing must be worn. Wear PVC oversuit.

9. Physical & Chemical Properties

Appearance	Clear blue solution.
Odour	Odourless.
pH	14 @ 20 °C
Boiling point	Aqueous solution
Melting point	Aqueous solution
Flash point	Not available
Upper Flammable Limit	Not available
Lower Flammable Limit	Not available
Auto Ignition	Not available
Explosive properties	No.
Oxidising Properties	No.
Vapour Pressure	Negligible
Relative Density	1.0150 °C
Water Solubility	Completely soluble in water.

10. Stability & Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	No specific conditions.
Materials to Avoid	Acids. Reacts with aluminium and zinc to produce extremely flammable hydrogen gas.
Hazardous Decomposition Products	None unusual.

11. Toxicological Information

Eyes	The liquid will irritate the eyes and can cause conjunctivitis.
Skin	The liquid will be irritating to the skin.
LD50 Skin	Not available
Ingest	Ingestion of large amounts may cause nausea, abdominal discomfort, vomiting and diarrhoea.
LD50 Ingest	Not available
Inhalation	Presents no significant health hazard by inhalation.
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

12. Ecological

Small amounts present no specific environmental hazard. Neutralised material presents no specific environmental hazard.

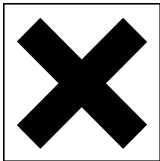
13. Disposal Considerations

Disposal Methods	Do not dispose of as domestic waste.
Contaminated Packaging	Clean out with a weak hydrochloric acid solution then wash out thoroughly with water.

14. Transport Information

Proper Shipping Name	Non-restricted
UN Number	Non-restricted
UN Classification	None
Subsidiary Risk	None
Flash Point	Not available
Packing Group	None
Transport Category	None
Marine pollutant	No
ADR Hazard ID	Non-restricted

15. Regulatory Information

Labelling	Irritant.
Classification	
Label Symbols	Xi 
Risk & safety Phrases	Irritating to eyes and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
EEC Number	Not available

16. Other Information

Document Information	This document has been prepared in accordance with directive 88/379/EEC. The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment.
----------------------	--

16. Other Information (continued)

Revision Date: 18/11/03.

Data reviewed and PDF file generated: 17/03/10.

Copyright 2010 Camlab Limited.