

Nitrate reagent 1 (Imidazole buffer)

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758 and SI 2020/1577

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Nitrate reagent 1 (Imidazole buffer)
Trade Name Imidazole buffer

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s) Reagent
Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Company Identification ClearWater Sensors
Address of Manufacturer Solent Business Centre 343 Millbrook Road West, Southampton
Postal code SO15 0HW
Telephone: +44 23 8212 2759
Fax Not known.
E-mail info@clearwatersensors.com
Office hours 09:00 - 17:00

Supplier

Company Identification ClearWater Sensors
Address of Supplier Solent Business Centre 343 Millbrook Road West, Southampton
Postal code SO15 0HW
Telephone: +44 23 8212 2759
Fax Not known.
E-mail info@clearwatersensors.com
Office hours 09:00 - 17:00

1.4 Emergency telephone number

Emergency Phone No. +44 23 8212 2759
Contact Technical department

National response centre

Address NHS Direct
Emergency Phone No. +44 111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GB CLP Regulation, UK SI 2019/720 and UK SI 2020/1567 Repr. 1B : May damage the unborn child.

2.2 Label elements

According to GB CLP Regulations, UK SI 2019/720 and UK SI 2020/1567
Product Name Nitrate reagent 1 (Imidazole buffer)

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Hazard Pictogram(s)



GHS08

Signal Word(s)

Danger

Hazard Statement(s)

H360D: May damage the unborn child.

Precautionary Statement(s)

None.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / Registration number(s)	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
imidazole	288-32-4	206-019-2	0.5	Acute Tox. 4 H302 Skin Corr. 1C H314 Repr. 1B H360D	GHS05 GHS08 GHS07
copper sulphate	7758-98-7	231-847-6	<0.001	Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Aquatic Acute 1 H400 Aquatic Chronic 1 H410	GHS07 GHS09

For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact	Wash skin with water.
Eye Contact	Flush eyes with water for at least 15 minutes.
Ingestion	Wash out mouth with water. IF exposed or concerned: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

IF exposed or concerned: Get medical advice/attention. Treat symptomatically.

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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media As appropriate for surrounding fire.
Unsuitable extinguishing media None.

5.2 Special hazards arising from the substance or mixture

Heating may cause decomposition.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

6.3 Methods and material for containment and cleaning up

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

7.2 Conditions for safe storage, including any incompatibilities

Store locked up.
Storage temperature Ambient.
Storage life Stable under normal conditions.
Incompatible materials None known.

7.3 Specific end use(s)

Reagent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

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Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Copper and compounds: dust and mists (as Cu)	7758-98-7		1		2	

Region	Source
United Kingdom	UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark	Notes
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8.2 Exposure controls

8.2.1. Appropriate engineering controls Ensure adequate ventilation.

8.2.2. Personal protection equipment



Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection

A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards

None known.

8.2.3. Environmental Exposure Controls Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Colour : Clear
Odour	Odourless
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	Not known.
Flash Point	Not known.
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	Not known.

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Density (g/ml)	0.9 g/cm ³
Relative density	Not known.
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Not known.
Explosive properties	Not known.
Oxidising properties	Not known.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

None anticipated.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Calculation method : Not classified. Calculation method : Calculated acute toxicity estimate (ATE) Calc ATE - 99800.40000
Acute toxicity - Skin Contact	Calculation method : Not classified.
Acute toxicity - Inhalation	Calculation method : Not classified.
Skin corrosion/irritation	Calculation method : Not classified.
Serious eye damage/irritation	Calculation method : Not classified.
Skin sensitization data	Calculation method : Not classified.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified.

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Carcinogenicity	Calculation method : Not classified.
Reproductive toxicity	Calculation method : May damage the unborn child.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Calculation method : Not classified.

11.2 Other information

Not known.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and degradability

Not known.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

Not known.

12.6 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Dispose of contents in accordance with local, state or national legislation. Dispose of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION**Not classified as hazardous for transport.****14.1 UN number**

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Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not classified as a Marine Pollutant.

14.6 Special precautions for user

Not known

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not known

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

United Kingdom Regulations - Authorisations and/or Restrictions On Use

UK REACH Candidate List of Substances of Very High Concern for Authorisation Not listed

UK REACH Authorisation List (Annex XIV) list of substances subject to authorisation Not listed

UK REACH Restrictions List (Annex XVII) Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Toxic to reproduction: category 1B (288-32-4), copper sulphate (7758-98-7)

The Persistent Organic Pollutants Regulations 2007 (SI 2007/3106) as amended Not listed

The Ozone-Depleting Substances and Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019/583) Not listed

The Prior Informed Consent (PIC) Regulations concerning the export and import of hazardous chemicals SI2008/2108 as amended Not listed

European Regulations - Authorisations and/or Restrictions On Use

Community Rolling Action Plan (CoRAP) imidazole (288-32-4)

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15.2 Chemical Safety Assessment

United Kingdom

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS08

GHS05: GHS: Corrosion

GHS07: GHS: Exclamation mark

GHS09: GHS: Environment

Hazard classification

Acute Tox. 4 : Acute toxicity, Category 4

Skin Corr. 1C : Skin corrosion/irritation, Category 1C

Skin Irrit. 2 : Skin corrosion/irritation, Category 2

Eye Irrit. 2 : Serious eye damage/irritation, Category 2

Repr. 1B : Reproductive toxicity, Category 1B

Aquatic Acute 1 : Hazardous to the aquatic environment, Acute, Category 1

Aquatic Chronic 1 : Hazardous to the aquatic environment, Chronic, Category 1

Hazard Statement(s)

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H360D: May damage the unborn child.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P405: Store locked up.

P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ATE : Acute Toxicity Estimate

CAS : Chemical Abstracts Service

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

vPvB : very Persistent and very Bioaccumulative

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Key literature references and sources for data used to compile the SDS GB CLP Regulation, UK SI 2019/720 and UK SI 2020/1567

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