

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: CEREAL PLUS

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

Use of substance / mixture: A soluble micronutrient for use in agriculture.

1.3. Details of the supplier of the safety data sheet

Company name: Headland Agrochemicals

Rectors Lane

Pentre

Deeside

Flintshire

CH5 2DH

United Kingdom

Tel: +44(0)1244 537370

Fax: +44(0)1244 532097

Email: enquiry@headlandgroup.com

1.4. Emergency telephone number

Emergency tel: +44(0)1244 537370

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Xi: R36; N: R51/53

Classification under CLP: Aquatic Chronic 2: H411; Skin Corr. 1C: H314

Most important adverse effects: Irritating to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

Label elements under CLP:

Hazard statements: H314: Causes severe skin burns and eye damage.

H411: Toxic to aquatic life with long lasting effects.

Signal words: Danger

Hazard pictograms: GHS05: Corrosion

GHS09: Environmental



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Precautionary statements: P264: Wash hands thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P391: Collect spillage.

Label elements under CHIP:

Hazard symbols: Irritant.
Dangerous for the environment.



Risk phrases: R36: Irritating to eyes.
R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases: S24/25: Avoid contact with skin and eyes.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S57: Use appropriate container to avoid environmental contamination.
S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

2.3. Other hazards

PBT: This product is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

MANGANESE DINITRATE

EINECS	CAS	CHIP Classification	CLP Classification	Percent
233-828-8	10377-66-9	O: R8; Xn: R22; C: R34; Xn: R48/20	Ox. Sol. 2: H272; Acute Tox. 4: H302; Skin Corr. 1C: H314; Eye Dam. 1: H318; STOT RE 2: H373; Aquatic Chronic 3: H412; -: EUH071	5-10%

COPPER SULPHATE

231-847-6	7758-98-7	Xn: R22; Xi: R36/38; N: R50/53	Acute Tox. 4: H302; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	5-10%
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ZINC SULPHATE

231-793-3	7733-02-0	Xn: R22; Xi: R41; N: R50/53	Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	1-5%
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Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

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6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Do not handle in a confined space. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in cool, well ventilated area. Store away from frost. Store above 5°C. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

COPPER SULPHATE

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	1 mg/m ³	2 mg/m ³	-	-

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area. The floor of the storage room must be impermeable to prevent the escape of liquids.

Respiratory protection: Respiratory protection not required.

Hand protection: Protective gloves.

Eye protection: Safety glasses. Ensure eye bath is to hand.

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Skin protection: Protective clothing.

Environmental: The floor of the storage room must be impermeable to prevent the escape of liquids.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Dark brown

Odour: Barely perceptible odour

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Relative density: 1.21-1.23

pH: 2 - 3

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

MANGANESE DINITRATE

ORAL	RAT	LD50	>300	mg/kg
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COPPER SULPHATE

IVN	RAT	LD50	48900	µg/kg
ORL	MUS	LD50	369	mg/kg
ORL	RAT	LD50	520	mg/kg

ZINC SULPHATE

IVN	RAT	LD50	69900	µg/kg
ORL	MUS	LD50	245	mg/kg
ORL	RAT	LD50	1710	mg/kg

Relevant effects for mixture:

Effect	Route	Basis
Irritation	OPT	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness. The eyes may water profusely.

Ingestion: There may be soreness and redness of the mouth and throat.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms.

Section 13: Disposal considerations

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13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN3082

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(COPPER SULPHATE; ZINC SULPHATE)

14.3. Transport hazard class(es)

Transport class: 9

14.4. Packing group

Packing group: III

14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

14.6. Special precautions for user

Special precautions: No special precautions.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport in bulk: The product is not transported in bulk tankers.

Section 15: Regulatory information

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: EUH071: Corrosive to the respiratory tract.

H272: May intensify fire; oxidiser.

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H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H373: May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.

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

H411: Toxic to aquatic life with long lasting effects.

H412: Harmful to aquatic life with long lasting effects.

R8: Contact with combustible material may cause fire.

R22: Harmful if swallowed.

R34: Causes burns.

R36/38: Irritating to eyes and skin.

R36: Irritating to eyes.

R41: Risk of serious damage to eyes.

R48/20: Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.