

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

1.1. Product identifier

Product name: FIELDER CEREAL MIX B

Product code: RL932

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

Use of substance / mixture: PC12: Fertilizers.

1.3. Details of the supplier of the safety data sheet

Company name: R&D Formulations

Park Farm

Park Farm Road

Kettlethorpe

Lincoln

LN1 2LD

United Kingdom

Tel: 01522 704848

Email: sds@nutrelgroup.co.uk

1.4. Emergency telephone number

Emergency tel: 01522 704848

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

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

Most important adverse effects: Causes severe skin burns and eye damage. Toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

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

H411: Toxic to aquatic life with long lasting effects.

Hazard pictograms: GHS05: Corrosion

GHS09: Environmental



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Signal words: Danger

Precautionary statements: P260: Do not breathe dust/fume/gas/mist/vapours/spray.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.
Rinse skin with water .
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

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

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

MANGANESE SULPHATE MONOHYDRATE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
232-089-9	10034-96-5	-	Eye Dam. 1: H318; STOT RE 2: H373; Aquatic Chronic 2: H411	1-10%

COPPER SULPHATE PENTAHYDRATE - REACH registered number(s): 01-2119520566-40

231-847-6	7758-99-8	-	Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	1-10%
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CITRIC ACID MONOHYDRATE - REACH registered number(s): 01-2119457026-42

201-069-1	5949-29-1	-	Eye Irrit. 2: H319	1-10%
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ZINC SULPHATE HEXAHYDRATE - REACH registered number(s): 01-2119474684-27

231-793-3	13986-24-8	-	Acute Tox. 4: H302; Eye Dam. 1: H318; Aquatic Chronic 1: H410; Aquatic Acute 1: H400	1-10%
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SOLUBLE BORON 21% - REACH registered number(s): 01-2119490860-33-XXXX

234-541-0	12280-03-4	-	Repr. 1B: H360FD	1-10%
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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. Consult a doctor.

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

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

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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: Exposure may cause coughing or wheezing.

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

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

Immediate / special treatment: Not applicable.

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: Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

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. Avoid the formation or spread of mists in the air.

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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

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

Workplace exposure limits: No data available.

DNEL/PNEC Values

Hazardous ingredients:

MANGANESE SULPHATE MONOHYDRATE

Type	Exposure	Value	Population	Effect
DNEL	Dermal	4.14	Workers	Local
DNEL	Inhalation	0.2	Workers	Local
DNEL	Dermal	2.1	Consumers	Local
DNEL	Inhalation	0.043	Consumers	Local
PNEC	Fresh water	0.0128	General Population	Local
PNEC	Marine water	0.4	General Population	Local
PNEC	Fresh water sediments	11.4	General Population	Local
PNEC	Marine sediments	1.4	General Population	Local
PNEC	Soil (agricultural)	25.1	General Population	Local
PNEC	Microorganisms in sewage treatment	56	General Population	Local

CITRIC ACID MONOHYDRATE

Type	Exposure	Value	Population	Effect
PNEC	Fresh water	0.44mg/l	-	-
PNEC	Marine water	0.044mg/l	-	-
PNEC	Fresh water sediments	3.46mg/l	-	-
PNEC	Marine sediments	34.6mg/l	-	-
PNEC	Microorganisms in sewage treatment	>1000mg/l	-	-
PNEC	Soil (agricultural)	33.1mg/kg	-	-

ZINC SULPHATE HEXAHYDRATE

Type	Exposure	Value	Population	Effect
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DNEL	Inhalation	1mg/m ³	Workers	Systemic
DNEL	Dermal	8.3mg/kg	Workers	Systemic
DNEL	Oral	0.83mg/kg	Consumers	Systemic
DNEL	Dermal	8.3mg/kg	Consumers	Systemic
PNEC	Fresh water	0.0206mg/l	-	-
PNEC	Marine water	0.0061mg/l	-	-
PNEC	Fresh water sediments	235.6mg/kg	-	-
PNEC	Marine sediments	113mg/kg	-	-
PNEC	Soil (agricultural)	106.8mg/kg	-	-
PNEC	Microorganisms in sewage treatment	0.0052mg/l	-	-

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Impermeable gloves.

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

Skin protection: Impermeable 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: Blue

Evaporation rate: No data available.

Oxidising: No data available.

Solubility in water: No data available.

Boiling point/range°C: No data available.

Flammability limits %: lower: No data available.

Flash point°C: No data available.

Autoflammability°C: No data available.

Relative density: 1.22-1.26

VOC g/l: No data available.

Melting point/range°C: No data available.

upper: No data available.

Part.coeff. n-octanol/water: No data available.

Vapour pressure: No data available.

pH: 1.5 - 2.5

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.

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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:

COPPER SULPHATE PENTAHYDRATE

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	480	mg/kg

CITRIC ACID MONOHYDRATE

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	MUS	LD50	5040	mg/kg
ORAL	RAT	LD50	3000	mg/kg

ZINC SULPHATE HEXAHYDRATE

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	>574	mg/kg

SOLUBLE BORON 21%

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	>2000	mg/kg

Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated

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Serious eye damage/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: Exposure may cause coughing or wheezing.

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

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

CITRIC ACID MONOHYDRATE

Daphnia magna	24H EC50	1535	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	48H EC50	440	mg/l

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

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/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

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

Disposal of packaging: Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

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

Section 14: Transport information

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14.1. UN number

UN number: UN1760

14.2. UN proper shipping name

Shipping name: CORROSIVE LIQUID, N.O.S.
(MANGANESE SULPHATE; COPPER SULPHATE PENTAHYDRATE; ZINC SULPHATE
HEXAHYDRATE; SOLUBLE BORON 21%)

14.3. Transport hazard class(es)

Transport class: 8

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.

Tunnel code: E

Transport category: 3

Section 15: Regulatory information

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

Specific regulations: Not applicable.

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: according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

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

Phrases used in s.2 and s.3: H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H319: Causes serious eye irritation.

H360FD: May damage fertility. May damage the unborn child.

H373: May cause damage to organs through prolonged or repeated exposure.

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

H411: Toxic to aquatic life with long lasting effects.

[cont...]

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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.