



SAFETY DATA SHEET

FOLIAR FIX ZINC ALOY

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Compilation date: 23/12/2015

Revision date: July 2017

Revision No: 2-A

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

1.1. Product identifier

Product name: FOLIAR FIX ZINC ALOY

Product code: C045

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: Safagrow Limited

1 Stapledon Road

Orton Southgate

Peterborough

Cambs.

PE2 6TB

United Kingdom

Tel: +44 (0) 1733 367650

Fax: +44 (0) 1733 367651

Email: support@safagrow.com

1.4. Emergency telephone number

Emergency tel: 01733 367650

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Irrit. 2: H315

Most important adverse effects: Causes skin irritation. Causes serious eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Label elements:

Hazard statements: H315: Causes skin irritation.

H318: Causes serious eye damage.

H400: Very toxic to aquatic life.

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

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Hazard pictograms: GHS05: Corrosion

GHS09: Environmental



Signal words: Danger

Precautionary statements: P264: Wash hands thoroughly after handling.

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

P302+352: IF ON SKIN: Wash with plenty of water/soap and water.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

P391: Collect spillage.

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:

ZINC OXIDE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	1314-13-2	-	Aquatic Chronic 1: H410; Aquatic Acute 1: H400	30-50%

ZINC NITRATE HEXAHYDRATE

231-943-8	10196-18-6	-	Ox. Sol. 2: H272; Acute Tox. 4: H302; Skin Irrit. 2: H315; Eye Irrit. 2: H319; STOT SE 3: H335; Aquatic Acute 1: H400; Aquatic Chronic 2: H411	1-10%
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MANGANESE NITRATE SOLUTION

233-828-8	10377-66-9	-	Acute Tox. 4: H302; Skin Corr. 1C: H314; STOT RE 2: H373; Aquatic Chronic 3: H412; Eye Dam. 1: H318	1-10%
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SODIUM N-LAUROYLSARCOSINATE

205-281-5	137-16-6	-	Acute Tox. 4: H332; Eye Dam. 1: H318	1-10%
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Section 4: First aid measures

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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. If irritation persists seek medical attention.
- Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.
- Ingestion:** Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Seek medical attention immediately and show container/label or this data sheet
- Inhalation:** Inhalation of product is unlikely Remove casualty from exposure ensuring one's own safety whilst doing so. If recovery is not rapid seek medical attention

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 pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.
- Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.
- Inhalation:** No data available.

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: This product is not flammable and does not support combustion 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: Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see

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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. Usual hygiene practices apply. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

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

Hazardous ingredients:

ZINC OXIDE

Workplace exposure limits:

Respirable dust

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	5 mg/m ³	10 mg/m ³	-	-

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

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

Respiratory protection: Respiratory protection not required. Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Protective gloves.

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Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Environmental: Prevent from entering in public sewers or the immediate environment.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid suspension

Colour: Beige

Odour: Characteristic odour

Evaporation rate: Negligible

Oxidising: No data available.

Solubility in water: Miscible in all proportions

Viscosity: Viscous

Boiling point/range°C: >90

Melting point/range°C: 0

Flammability limits %: lower: Not applicable.

upper: Not applicable.

Flash point°C: >93

Part.coeff. n-octanol/water: Not applicable.

Autoflammability°C: No data available.

Vapour pressure: No data available.

Relative density: 1.79 - 1.82

pH: 5 - 8

VOC g/l: Not applicable.

9.2. Other information

Other information: Not applicable.

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: Oxidising agents. Acids.

10.6. Hazardous decomposition products

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

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Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

ZINC OXIDE

DUST/MIST	RAT	4H LC50	5.7	mg/l
IPR	RAT	LD50	240	mg/kg
ORAL	RAT	LD50	>8437	mg/kg
ORL	MUS	LD50	7950	mg/kg

ZINC NITRATE HEXAHYDRATE

ORAL	MUS	LD50	926	mg/kg
ORAL	RAT	LD50	1190	mg/kg

SODIUM N-LAUROYLSARCOSINATE

ORAL	RAT	LD50	>5000	mg/kg
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Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated
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 pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: No data available.

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

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

ZINC OXIDE

ALGAE	72H ErC50	0.17	mg/l
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BLUEGILL (<i>Lepomis macrochirus</i>)	96H LC50	>320	mg/l
Daphnia magna	48H EC50	24.6	mg/l

ZINC NITRATE HEXAHYDRATE

BLUEGILL (<i>Lepomis macrochirus</i>)	96H LC50	0.1	mg/l
RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	96H LC50	0.43	mg/l

MANGANESE NITRATE SOLUTION

DAPHNIA	48H EC50	9.8	mg/l
RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	96H LC50	14.5	mg/l

SODIUM N-LAUROYLSARCOSINATE

Daphnia magna	48H EC50	29.7	mg/l
GREEN ALGA (<i>Selenastrum capricornutum</i>)	72H ErC50	79	mg/l
ZEBRAFISH (<i>Brachydanio rerio</i>)	96H LC50	107	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.

Recovery operations: Not applicable.

Disposal of packaging: Triple rinse and puncture the empty container. Do not reuse the container for any purpose. Dispose of waste and residues in accordance with local authority requirements.

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

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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.
(ZINC OXIDE)

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.

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: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

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

Phrases used in s.2 and s.3: H272: May intensify fire; oxidiser.

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.

[cont...]

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H332: Harmful if inhaled.

H335: May cause respiratory 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>.

H400: Very toxic to aquatic life.

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.

Legal disclaimer: The product should not be used for other purposes than those specified under section 1. Attention of users is drawn to the possible risks incurred when the product is used for purposes other than those for which it was designed. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. The company shall not be held liable for any damage resulting from handling or from contact with the above product.