



According to EC Regulations No. 453/2010 (REACH), 1272/2008 (CLP) & 453/2010

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

1.1. Product identifier

Trade name Elona Mg, Elona Top
Product code LEV2017-15
REACH registration No. Not applicable

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

Identified use(s) Use as a foliar fertiliser for dilution
Uses advised against Not suitable for use as a ready to use product

1.3. Details of the supplier of the safety data sheet

Supplier name: Leivity Crop Science Ltd
Supplier address: Leivity Crop Science Ltd
The Rural Business Centre
Myerscough College
Bilsborrow
United Kingdom
PR3 0RY

Supplier telephone: +44 (0) 1995 642351
Email: info@leivitycropscience.com

1.4. Emergency telephone number

Emergency phone No. +44 (0) 111 (24-hour line, English main language, interpreters available)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Regulation (EC) No.1272/2008 (CLP) Skin Corrosion (Category 1)
Serious Eye Damage (Category 1)
Chronic Aquatic Toxicity (Category 3)

2.2. Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]



CLP Hazard Pictograms:

Signal Word(s): Danger

Hazard Statements:

H314 Causes severe skin burns and eye damage
H412 Harmful to aquatic life with long lasting effects



Precautionary Statements:

P260	Do not breathe mist/ 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): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove
P310	Immediately call a POISON CENTRE or doctor/ physician
2.3. Other hazards	This product has not been tested for PBT or vPvB

SECTION 3: Composition/information on ingredients

3.2. Mixtures

EC Classification No 1272/2008

Hazardous ingredient(s)	%w/w	CAS no	EC no	REACH Registration no	Hazard statements
Zinc chloride	>1% - <10%	7646-85-7	231-592-0	01-2119472431-44	H302, H314, H335, H400, H410

SECTION 4: First aid measures

4.1. Description of first aid measures

4.1.1. First aid instructions.

If inhaled:	Move person into fresh air, rest in a position comfortable for breathing and seek medical attention if breathing becomes difficult
If on skin (or hair):	Wash affected skin thoroughly with soap and water, remove and wash clothes before reuse
If in eyes:	Wash affected eyes for at least 15 minutes under running water with eyelids held open. Remove contact lenses if possible. Seek medical attention
If swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth and throat. Do not induce vomiting. Drink 1-2 glasses of water. Consult a physician
Other first aid advice:	If vomiting occurs spontaneously, keep airways clear. Give more water when vomiting stops

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

If inhaled:	Inhalation of mist or vapours may cause irritation and a burning sensation to mucous membranes and upper respiratory tract. Symptoms may include irritation, coughing and tightness of breath, a sore throat may result from exposure
If on skin (or hair):	Exposure can result in redness, itching and soreness. Where not washed skin burns may occur, especially to already damaged or abraded skin



If in eyes: Exposure to eyes will result in immediate pain and tearing. Corrosive damage to the eyes may occur if not washed promptly

If swallowed: Ingestion may cause prompt nausea and vomiting. Irritation and burns to the mouth, throat and gastrointestinal tract may occur

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

Medical treatment: Treatment should be symptomatic and supportive. Medical regimes should be dictated by a medical professional

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: All extinguishing agents permitted

Unsuitable extinguishing media: None known

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products: Oxides of magnesium, zinc, chlorine and carbon

Other special hazards during fire: None known

5.3. Advice for firefighters

Protective actions during firefighting: Wear self-containing breathing apparatus

Special protective equipment for firefighters: No special instructions

Other advice: Keep product containers cool with water spray

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Non-emergency personnel PPE See section 8.2

Emergency responders PPE See section 8.2

Controlling risks from accidental release: Remove any contaminated soil. Ensure that contaminated equipment and surfaces are promptly cleaned

Emergency procedures: Evacuate personnel to safe areas

6.2. Environmental precautions

Keep accidental releases away from: Drains, water courses, soil and open ground. Discharge to ground, water courses or drains can cause eutrophication

6.3. Methods and material for containment and cleaning up

Containing a spill: Mop up and contain with absorbent materials



Cleaning up a spill

Mop spills

Other information on spill handling:

Material is water miscible, rain will cause the material to wash away and spread beyond the area of spillage

6.4. Reference to other sections

References to other sections:

See section 8.2 for personal protective equipment. See section 13.1 for disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Safe handling recommendations:

Wash hands and exposed skin before meals and after use. Wear gloves when handling the product over long periods of time

Handling incompatibles:

Do not use with strong bases

Reducing environmental risk:

Do not discharge into drains or water courses

Occupational hygiene advice

Wash hands after using this product and before eating, drinking or smoking. Remove contaminated clothing and protective equipment before entering eating areas

7.2. Conditions for safe storage, including any incompatibilities

Safe storage: managing risks during storage:

Explosive atmospheres formed during storage: Not applicable

Corrosive conditions during storage: Not applicable

Flammability hazards during storage: Not applicable

Incompatible substances or mixtures: Product will precipitate and when mixed with strong alkalis

Evaporative conditions: Not applicable

Potential ignition sources, including electrical equipment: Not applicable

Safe storage: controlling effects of ambient conditions:

Weather conditions: Do not store outside uncontained

Ambient pressure: Not applicable

Temperature: Not applicable

Sunlight: Keep out of direct sunlight

Humidity: Not applicable

Vibration: Not applicable

Safe storage: maintaining the integrity of the product:



Stabilisers: Stabilisers are not used in this product

Antioxidants: Antioxidants are not used in this product

Safe storage: other advice:

Ventilation requirements for storage: No specific ventilation requirements

Specific designs for storage rooms or vessels: No specific design criteria on storage areas apart from normal regulatory requirements for substances of this type

Quantity limits under storage conditions: Not applicable

Suitable packaging for the substance: Keep in original container

7.3. Specific end use(s)

Uses: Use as a foliar fertiliser concentrate for dilution

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure limits:

Substance	CAS No	LTEL TWA 8hr mg/m ³	STEL TWA 8hr mg/m ³	Notes
Zinc chloride	7646-85-7	1	2	EH40

8.1.2 Biological Limit Values: Not applicable

8.1.3 Current recommended monitoring procedures: Not applicable

8.1.4 Air contaminants formed when using the product as intended: Not applicable

8.1.5. PNECs and DNELs Not applicable

8.2. Exposure controls

8.2.1. Appropriate engineering controls: Handle in accordance with good industrial hygiene

8.2.2. Personal Protection Equipment

Eye protection: Use safety goggles tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

Face protection: Not required

Hand protection: When handling the product over an extended period of time use nitrile, latex or rubber gloves, which satisfy the specifications of EU Directive 89/686/EEC and the standard EN 384 derived from it

Other skin protection: A protective overall suit satisfying the standard of EN 13034:2005 may be required for spraying situations where mists and aerosols are generated in uncontrolled environments (i.e. changing winds). Do not wear open footwear



Respiratory protection Not required

Thermal hazards Not required

8.2.3. Environmental exposure controls Do not release substance to drains or surface water

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:	Clear bright yellow liquid
Physical state:	Liquid
Colour:	Clear, bright yellow
Odour:	Minimal, slightly ferric
Odour threshold:	Data not available
pH:	1.0 – 2.0
Melting point:	Data not available
Freezing point:	Data not available
Initial boiling point:	100°C for aqueous component
Boiling range:	Data not available
Flash point:	Data not available
Flash point method:	Data not available
Evaporation rate:	Data not available
Flammability (if solid or gas):	Data not available
Upper and lower flammability or explosive limits:	Data not available
Vapour pressure:	Data not available
Vapour density:	Data not available
Relative density:	1.30 – 1.32 g ml ⁻¹ at 20°C
Solubility(ies)	Completely miscible in water
Partition coefficient: n-octanol/water	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available
Viscosity	<100 cPs, Newtonian liquid
Explosive properties	Data not available
Oxidising properties	Data not available



9.2. Other information

Data not available

SECTION 10: Stability and reactivity

- 10.1. Reactivity** Can react with bases
- 10.2. Chemical stability** Product is stable under anticipated storage and handling conditions
- 10.3. Possibility of hazardous reactions** Substance not known to react and/or polymerise
- 10.4. Conditions to avoid** Mixing with alkalis
- 10.5. Incompatible materials** Alkaline materials
- 10.6. Hazardous decomposition products** No known hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- Acute toxicity Acute toxicity point estimate based on classification
Oral LD50; >2,000 mg/kg body weight
- Skin corrosion/irritation Classified as corrosive to skin
- Serious eye damage/irritation Classified as corrosive to the eyes
- Respiratory or skin sensitisation Data not available
- Germ cell mutagenicity Data not available
- Carcinogenicity Data not available
- Reproductive toxicity Data not available
- STOT-repeated exposure; Data not available

11.2. Other information No other information

SECTION 12: Ecological information

12.1. Toxicity

No test data is available for this product. Data reported for relevant constituent components.

Zinc chloride; CAS 7646-85-7

Species	Test	Value
Fathead minnow (<i>Pimephales promelas</i>)	LC50 96H	0.33 mg/L
Rainbow trout (<i>Oncorhynchus mykiss</i>)	LC50 96H	0.17 mg/L
Water flea (<i>Daphnia magna</i>)	EC50 48H	0.10 mg/L
Algae (<i>Pseudokirchnerella subcapitata</i>)	NOEC 24d	19 µg/L

12.2. Persistence and degradability No test data available; inorganic component is expected to persist and is non-biodegradable



12.3. Bioaccumulative potential	Data not available
12.4. Mobility in soil	Data not available
12.5. Results of PBT and vPvB assessment	Data not available
12.6. Other adverse effects	
Environmental fate	Data not available
Photochemical ozone creation potential	Data not available
Ozone depletion potential	Data not available
Endocrine disrupting potential	Data not available
Global warming potential	Data not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

This material, if discarded as produced, is classified as a hazardous waste. Waste treatment containers to be used for product include IBCs or HDPE drums. Recycle material where possible. If heavily soiled or disposal judged as necessary dispose in accordance with the Directive on waste 2008/98/EC

No specific waste treatment containers to be used for contaminated packaging, packaging should be recycled where possible. Waste treatment method for contaminated packaging should include a triple rinse with water. Dilute washings should be recycled where possible

SECTION 14: Transport information

14.1. UN number	UN3264
14.2. UN proper shipping name	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., CONTAINS (ZINC CHLORIDE)
14.3. Transport hazard class(es)	8
14.4. Packing group	III
14.5. Environmental hazards	Not applicable
14.6. Special precautions for user	Not applicable
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable

SECTION 15: Regulatory information

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

Ozone depleting substance (EC No 2037/2000): Not applicable

Persistent organic pollutants (EC No 850/2004) Not applicable



Export and import of dangerous chemicals (EC No 689/2008) Not applicable

COMAH/ Seveso II categories or named substance Not applicable

REACH Authorisations and/or Restrictions Not applicable

Any other relevant Safety, health and environmental regulations: Not applicable

15.2. Chemical safety assessment A chemical safety assessment has not been carried out for this product

SECTION 16: Other information

a) Changes made to SDS:

New safety datasheet

b) Key (or legend)

PPE	Personal Protective Equipment
LD50	Lethal Dosage affecting 50% of sample population
LC50	Lethal Concentration affecting 50% of sample population
EC50	Effective Concentration affecting 50% of sample population
TWA	Time Weighted Average
LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit

c) Literature references

European Chemicals Agency:

<http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>

NLM – Toxicology Data Network:

<https://www.nlm.nih.gov/>

EH40 Workplace Exposure Limits

<http://www.hse.gov.uk/pUbns/priced/eh40.pdf>

Last accessed (06/06/2019)

Some data has been derived from constituent safety datasheets

d) Details of relevant hazard information

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
P260	Do not breathe mist/ spray
P264	Wash hands thoroughly after handling
P273	Avoid release to the environment
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection
P270	Do not eat, drink or smoke when using this product
P301 + P312	IF SWALLOWED: Call a POISON CENTRE or doctor/ physician if you feel unwell
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position 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
P310	Immediately call a POISON CENTRE or doctor/physician



EU Safety Data Sheet

Version 1.0
Updated: 06.06.2019

P321	Specific treatment (see on this label)
P330	Rinse mouth
P363	Wash contaminated clothing before reuse
P405	Store locked up
P501	Dispose of contents in accordance with local regulations, dispose of container to appropriate domestic recycling stream

e) Appropriate training for workers

Training for spillage handling and chemical handling is recommended

f) Classification method:

CLP classification, non-additive method for skin corrosion classification, summation method for aquatic toxicity classification