

Safety Data Sheet

Issue Date 12-Mar-2019

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Version: 3

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

1.1. Product identifier

Product Name Agroleaf liquid 10-10-10+TE
Product Code: 31650310GA
Pure substance/mixture Mixture.

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

Recommended Use Fertilizer (PC12). Restricted to professional users.
Uses Advised Against: Consumer use [SU 21].

1.3. Details of the supplier of the safety data sheet

Everris International B.V. Nijverheidsweg 1-5; 6422 PD Heerlen (NL); Tel: +31 (0)45-5609100; Fax: +31 (0)45-5609190.

For further information, please contact: INFO-MSDS@EVERRIS.COM.

1.4. Emergency telephone number: IN CASE OF AN EMERGENCY CALL: +44 1235 239 670 (24h).

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Mixture

Regulation (EC) No 1272/2008 (CLP)

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

EU Specific Hazard Statements:

EUH210 - Safety data sheet available on request

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No.	CAS No	Weight %	Classification according Regulation (EC) 1272/2008 [CLP]	REACH registration number
Potassium hydroxide; KOH	019-002-00-8	1310-58-3	10 - 25%	Acute Tox. 4 (H302) Skin Corr. 1A (H314)	01-2119487136-33
Phosphoric acid	231-633-2	7664-38-2	10 - 25%	Skin Corr. 1B (H314)	01-2119485924-24
Boric acid; H ₃ BO ₃	233-139-2	10043-35-3	1 - 5%	Repr. 1B (H360FD)	01-2119486683-25
Inert Ingredients	No EC nr.	PROPRIETAR Y	1 - 5%	Not classified	no data available
Iron-EDTA-13; Fe-EDTA	239-802-2	15708-41-5	0.1 - 1%	Not classified	01-2119496228-27
Manganese-EDTA, Mn-EDTA	239-407-5	15375-84-5	0.1 - 1%	Not classified	01-2119493600-40
Zinc-EDTA; Zn-EDTA	237-865-0	14025-21-9	0.1 - 1%	Not classified	01-2119963942-27
Copper-EDTA; Cu-EDTA	237-864-5	14025-15-1	< 0.1%	Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	01-2119963944-23
Sodium molybdate; Na ₂ MoO ₄	231-551-7	7631-95-0	< 0.1%	Not classified	01-2119489495-21

Component	SVHC candidates
Boric acid; H ₃ BO ₃ 10043-35-3 (1 - 5%)	Present

Full text of H- and EUH-phrases: see section 16.

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice:	First aid measures should be executed by trained personnel only.
Inhalation	If not breathing, give artificial respiration. If symptoms persist, call a physician. If fumes from reactions are inhaled, move to fresh air immediately.
Skin Contact:	If skin irritation persists, call a physician.
Eye Contact:	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
Ingestion:	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

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

None under normal processing

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

None under normal processing.

Section 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media: Coordinate fire extinguishing measures to fire in surrounding area.

Unsuitable Extinguishing Media: High volume water jet.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

5.3. Advice for firefighters

Use extinguishing agent suitable for type of surrounding fire. In the event of fire and/or explosion do not breathe fumes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Wear personal protective equipment. Evacuate personnel to safe areas.

For Emergency Responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not allow material to contaminate ground water system.

6.3. Methods and material for containment and cleaning up

Methods for Containment: Prevent further leakage or spillage if safe to do so.

Methods for Cleanup: Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

§ 8, 12, 13.

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

General hygiene considerations:

Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. When using, do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/storage conditions:

Keep container tightly closed in a dry and well-ventilated place. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used packaging should be closed well. Keep away from flammable material. Store in original container. Store in a closed container.

Packaging Materials:

7.3. Specific end use(s)

Specific use(s)

Fertilizer; www.everris.com; Read and follow label instructions

Exposure scenario

Mixture. Not required.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<i>Potassium hydroxide; KOH</i>	
Austria	TWA: 2 mg/m ³
Bulgaria - OEL- TWAs	2.0 mg/m ³ TWA
Croatia - OEL - STELs (KGVIs)	2 mg/m ³ STEL [KGVl]
Czech Republic OEL	1 mg/m ³ TWA
Denmark	Ceiling: 2 mg/m ³
Finland	Ceiling: 2 mg/m ³
FR - OEL - 8h VMEs	STEL: 2 mg/m ³
greece OEL 15 minute	2 mg/m ³ STEL
Hungary - OEL - TWAs	2 mg/m ³ TWA
Indonesia - OEL - STELs (PSDs)	2 mg/m ³ STEL
Ireland	STEL: 2 mg/m ³
Norway	Ceiling: 2 mg/m ³
Poland	STEL: 1 mg/m ³ TWA: 0.5 mg/m ³
Portugal	Ceiling: 2 mg/m ³
Spain - Valores Limite Ambientales - VLE	STEL: 2 mg/m ³
Switzerland	TWA: 2 mg/m ³
<i>Phosphoric acid</i>	
European Union	TWA 1 mg/m ³ STEL 2 mg/m ³
Austria	STEL 2 mg/m ³ TWA: 1 mg/m ³
Australia	1 mg/m ³ TWA
Belgium - 8 Hr TWA	1 mg/m ³ TWA
Bulgaria - OEL- TWAs	1.0 mg/m ³ TWA
Croatia - OEL - STELs (KGVIs)	2 mg/m ³ STEL [KGVl]
Czech Republic OEL	1 mg/m ³ TWA
Denmark	TWA: 1 mg/m ³
Estonia - OEL - STELs	2 mg/m ³ STEL (vapor)
Finland	TWA: 1 mg/m ³ STEL: 2 mg/m ³
FR - OEL - 8h VMEs	TWA: 0.2 ppm TWA: 1 mg/m ³ STEL: 0.5 ppm STEL: 2 mg/m ³
greece OEL 15 minute	3 mg/m ³ STEL
Hungary - OEL - TWAs	1 mg/m ³ TWA
Iceland - OEL - 8 Hour	1 mg/m ³ TWA
Indonesia - OEL - STELs (PSDs)	3 mg/m ³ STEL
Italy OEL Data - TWA:	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Ireland	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Japan	1 mg/m ³ OEL
Korea - ISHA - OEL - TWAs	1 mg/m ³ TWA (Serial No. 489)

Latvia - OEL - TWAs	1 mg/m ³ TWA
Malaysia	1 mg/m ³ TWA
NL MAC - TWA:	STEL: 2 mg/m ³ TWA: 1 mg/m ³
Norway	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Poland	STEL: 2 mg/m ³ TWA: 1 mg/m ³
Portugal	STEL: 3 mg/m ³ TWA: 1 mg/m ³
Romania - OEL - TWAs	1 mg/m ³ TWA
Slovenia - OEL - TWAs	1 mg/m ³ TWA
Spain - Valores Limite Ambientales - VLE	STEL: 2 mg/m ³ TWA: 1 mg/m ³
Singapore - OEL:PELs	1 mg/m ³ PEL
Switzerland	STEL: 2 mg/m ³ TWA: 1 mg/m ³
<i>Boric acid; H₃BO₃</i>	
Australia	12 mg/m ³
Belgium - 8 Hr TWA	2 mg/m ³ TWA borate
Bulgaria - OEL- TWAs	5.0 mg/m ³ TWA (as B, listed under Boron and its inorganic compounds)
Ireland	TWA: 2 mg/m ³ STEL: 6 mg/m ³
Latvia - OEL - TWAs	10 mg/m ³ TWA
Portugal	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Spain - Valores Limite Ambientales - VLE	STEL: 6 mg/m ³ TWA: 2 mg/m ³
Switzerland	STEL: 1.8 mg/m ³ TWA: 1.8 mg/m ³
<i>Iron-EDTA-13; Fe-EDTA</i>	
Denmark	TWA: 1 mg/m ³
Finland	TWA: 1 mg/m ³
Portugal	TWA: 1 mg/m ³
Spain - Valores Limite Ambientales - VLE	TWA: 1 mg/m ³
Switzerland	TWA: 1 mg/m ³
UK EH40 WEL (8h)	1 mg/m ³ TWA
<i>Manganese-EDTA; Mn-EDTA</i>	
Czech Republic OEL	1 mg/m ³ TWA
Ireland	TWA: 0.2 mg/m ³ STEL: 0.6 mg/m ³
<i>Copper-EDTA; Cu-EDTA</i>	
Austria	STEL 0.4 mg/m ³ TWA: 0.1 mg/m ³
Australia	N.A.
Finland	TWA: 0.02 mg/m ³
<i>Sodium molybdate; Na₂MoO₄</i>	
Austria	STEL 10 mg/m ³ TWA: 5 mg/m ³
Czech Republic OEL	5 mg/m ³ TWA
Denmark	TWA: 5 mg/m ³
Finland	TWA: 0.5 mg/m ³
FR - OEL - 8h VMEs	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Ireland	TWA: 10 mg/m ³ STEL: 30 mg/m ³
Norway	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Poland	STEL: 10 mg/m ³ TWA: 4 mg/m ³
Portugal	TWA: 0.5 mg/m ³
Spain - Valores Limite Ambientales - VLE	TWA: 0.5 mg/m ³
Switzerland	TWA: 5 mg/m ³

Derived No Effect Level (DNEL)

Predicted No Effect Concentration (PNEC)

No data available

8.2. Exposure controls**Personal protective equipment****Eye/Face Protection**

Wear eye/face protection

Hand protection

Gloves. Nitrile rubber (0.26 mm). Break through time. > 8 h.

Respiratory Protection

Not required; except in case of aerosol formation. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit

Skin and body protection:

Lightweight protective clothing

Hygiene Measures:

When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Physical State:	Liquid
Appearance:	aqueous solution
Color:	No information available.
Odor:	None
pH:	+/- 6.5
Melting Point/Freezing Point:	no data available
Boiling Point/Range:	100 ° C .
Flash Point:	. no data available.
Evaporation Rate:	. no data available.
Flammability (solid, gas):	Not flammable
Vapor Pressure:	. no data available.
Vapour density	. no data available.
Relative density	No data available
Water Solubility:	No data available
Solubility(ies)	No data available
Partition Coefficient:	. no data available.
Autoignition Temperature:	No data available
Decomposition temperature:	No data available
Explosive Properties:	Doesn't present explosion hazard.
9.2. Other information	
VOC Content (%):	Not applicable.

Section 10: STABILITY AND REACTIVITY**10.1. Reactivity**

Not reactive.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

10.4. Conditions to avoid

For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used packaging should be closed well.

10.5. Incompatible materials

Keep away from catalysts like derivatives of hexavalent chromium and metal halides. Keep away from flammable products (fuels) like charcoal, wood, flour, soot etc.

10.6. Hazardous decomposition products

None under normal processing. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects**Product Information**

If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

Information on the Likely Routes of Exposure (inhalation, ingestion, skin and eye contact):

Inhalation	Inhalation of dust in high concentration may cause irritation of respiratory system.
Eye contact	May cause slight irritation.
Skin Contact	May cause irritation.
Ingestion	May cause gastrointestinal discomfort if consumed in large amounts.

Information on Toxicological Effects

None known

Acute Toxicity

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide; KOH	= 284 mg/kg (Rat)		
Phosphoric acid	= 1530 mg/kg (Rat)	= 2740 mg/kg (Rabbit)	> 850 mg/m ³ (Rat) 1 h
Boric acid; H ₃ BO ₃	= 2660 mg/kg (Rat)	> 2000 mg/kg	> 0.16 mg/L (Rat) 4 h
Iron-EDTA-13; Fe-EDTA	= 5 g/kg (Rat) > 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 2.05 g/m ³ (Rat) 4 h
Zinc-EDTA; Zn-EDTA	= 1750 mg/kg (Rat)		
Sodium molybdate; Na ₂ MoO ₄	= 4233 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 2080 mg/m ³ (Rat) 4 h

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-Term Exposure:

If this product is a mixture, the classification is not based on toxicology studies for this product, but is based solely on toxicology studies for ingredients found within this product. More detailed substance and/or ingredient information may be provided in the other sections of this SDS

Serious eye damage/eye irritation	Classification based on individual ingredients of the mixture.
Respiratory or skin sensitization	Classification based on individual ingredients of the mixture.
Germ Cell Mutagenicity	Classification based on individual ingredients of the mixture.
Carcinogenicity	Classification based on individual ingredients of the mixture.
Reproductive Toxicity	Classification based on individual ingredients of the mixture.
STOT - Single Exposure	Classification based on individual ingredients of the mixture.
STOT - Repeated Exposure	Classification based on individual ingredients of the mixture.
Aspiration Hazard	Classification based on individual ingredients of the mixture.

Section 12: ECOLOGICAL INFORMATION**12.1. Toxicity****Ecotoxicity**

Should not be released into the environment

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Potassium hydroxide; KOH	-	80: 96 h Gambusia affinis mg/L LC50 static	-	-
Phosphoric acid	-	3 - 3.5: 96 h Gambusia affinis mg/L LC50	-	4.6: 12 h Daphnia magna mg/L EC50

Boric acid; H ₃ BO ₃	-	1020: 72 h Carassius auratus mg/L LC50 flow-through	-	115 - 153: 48 h Daphnia magna mg/L EC50
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12.2. Persistence and degradability**Persistence and Degradability:**

No persistent or cumulative effects were observed.

12.3. Bioaccumulative potential**Bioaccumulation:**

Does not bioaccumulate.

Chemical Name	LOGPOW
Potassium hydroxide; KOH	0.83
Boric acid; H ₃ BO ₃	-0.757

12.4. Mobility in soil

No data available.

12.5. PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods**Disposal of Wastes:**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging:

Do not reuse container.

Other Information

Use up product completely. Packaging material is industrial waste.

Section 14: TRANSPORT INFORMATION

IMO / IMDG**14.1****UN-No:**

Not regulated

14.2**Proper shipping name:**

Not regulated

14.3**Hazard Class:**

Not regulated

14.4**Packing group:**

Not regulated

14.5**Marine Pollutant:**

No information available

14.6**Special Provisions**

None

14.7**Bulk transport according Annex II of MARPOL and IBC Code** No data available**ADR/RID****14.1****UN-No:**

Not regulated

14.2**Proper shipping name:**

Not regulated

14.3**Hazard Class:**

Not regulated

14.4**Packing group:**

Not regulated

14.5**Environmental Hazard**

Not regulated

14.6**Special Provisions**

None

IATA

14.1	
UN-No:	Not regulated
14.2	
Proper shipping name:	Not regulated
14.3	
Hazard Class:	Not regulated
14.4	
Packing group:	Not regulated
14.5	
Environmental Hazard	Not regulated
14.6	
Special Provisions	None

Section 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Belgium****Denmark**

Denmark No data available

France

ICPE No data available

Germany

LGK (Germany) No data available

Component	German WGK Section
Potassium hydroxide; KOH 1310-58-3 (10 - 25%)	class 1
Phosphoric acid 7664-38-2 (10 - 25%)	class 1
Boric acid; H ₃ BO ₃ 10043-35-3 (1 - 5%)	1
Inert Ingredients PROPRIETARY (1 - 5%)	3
Iron-EDTA-13; Fe-EDTA 15708-41-5 (0.1 - 1%)	2
Manganese-EDTA, Mn-EDTA 15375-84-5 (0.1 - 1%)	2
Zinc-EDTA; Zn-EDTA 14025-21-9 (0.1 - 1%)	3
Copper-EDTA; Cu-EDTA 14025-15-1 (< 0.1%)	2
Sodium molybdate; Na ₂ MoO ₄ 7631-95-0 (< 0.1%)	1

Component	EU - Explosives Precursors Marketing and Use (98/2013) - Substances Subject to Suspicious Transactions Reporting	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Boric acid; H ₃ BO ₃ 10043-35-3 (1 - 5%)		Use restricted. See item 30.

Component	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances for Eventual Inclusion in Annex XIV
Boric acid; H ₃ BO ₃ 10043-35-3 (1 - 5%)	Reason for inclusion Toxic for reproduction, Article 57c (233-139-2)

15.2 Chemical safety assessment

Substance(s) usage is covered according to Reach regulation 1907/2006

Take note of Dir. 98/24/EC on the protection of the health and safety of workers from risks related to chemical agents at work

Chemical Name	Restricted substance per REACH Annex XVII	Substance subject to authorization per REACH Annex XIV
Boric acid; H ₃ BO ₃	Use restricted. See item 30.	

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

- H302 - Harmful if swallowed
- H314 - Causes severe skin burns and eye damage
- H360FD - May damage fertility. May damage the unborn child

Key or legend to abbreviations and acronyms used in the safety data sheet

RID: Regulations Concerning the International Transport of Dangerous Goods by Rail

ICAO: International Civil Aviation Organization

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PNEC: Predicted No Effect Concentration

DNEL: Derived No-Effect Level

REACH: Registration, Evaluation, Authorization of Chemicals

CLP: EU-GHS; Classification, Labelling and Packaging

OEL: Occupational Exposure Limit

TWA: Time Weighted Average

ATE: Acute Toxicity Estimate

EUH phrase: CLP (EU) specific hazard statement

LD50: Lethal dose, 50%.

LC50: Lethal concentration, 50%.

SVHC: Substance of Very High Concern.

Classification procedure

- Calculation method
- Expert judgment and weight of evidence determination

Key literature references and sources for data

According to EC Regulation 1907/2006 (Reach), Regulation EU No. 2015/830. Regulation (EC) No 1272/2008 (CLP).

Prepared by

Regulatory Affairs Department (INFO-MSDS@EVERRIS.COM)

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Restrictions on use

Restricted to professional users

Reason for revision

*** Indicates changes since the last revision. This version replaces all previous versions

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