Safety Data Sheet

Issue Date: 24-Feb-2015 Revision Date: 14-Mar-2016 Version: 3

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

1.1. Product identifier

Product Name: Greenmaster Liquid NK 10-0-10+TE

Product Code 31010199DA

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

Recommended Use: Fertilizer. Restricted to professional users.

Uses Advised Against: Consumer use.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Everris International BV

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

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

2.2. Label elements

Product Identifier:

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

Signal Word:

None

EUH210 - Safety data sheet available on request

Precautionary Statements - EU (§28, 1272/2008)

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Ingredients	EC-No.	CAS-No	Weight %	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
	200-315-5	57-13-6	10 - 25%	Not classified	01-2119463277-33
Urea					
	201-069-1	77-92-9	10 - 25%	Eye Irrit. 2 (H319)	01-2119457026-42
Citric acid; C ₆ H ₈ O ₇					

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Ammonium Nitrate; NH ₄ NO ₃	229-347-8	6484-52-2	1 - 5%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Manganese-EDTA, Mn-EDTA	239-407-5	15375-84-5	< 0.1%	Not classified	01-2119493600-40
Disodium octaborate tetrahydrate	234-541-0	12280-03-4	< 0.1%	Repro. 1B (H360)	01-2119490860-33
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 +2H ₂ O	231-551-7	7631-95-0	< 0.1%	Not classified	01-2119489495-21

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: Move to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a

physician.

Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and

shoes.

Eye Contact: Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if

present, after the first 5 minutes, then continue rinsing.

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.

Protection of First-Aiders: Low hazard for usual industrial or commercial handling.

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

Symptoms: None under normal processing

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

Notes to Physician: 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. Use dry chemical, CO2, water spray or "alcohol" foam.

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

Coordinate fire extinguishing measures to fire in surrounding area.

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 product to enter the environment uncontrolled.

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.

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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.

LGK (Germany) Exempt

Packaging Materials: Store in original container.

7.3. Specific end use(s)

Specific use(s)

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

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Llace	
Urea	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA
Norway	TWA: 30 μg Hg/g Creatinine
	STEL: 45 µg Hg/g Creatinine
Ammonium Nitrate; NH₄NO₃	
Australia TWA	N.A.
Czech Republic OEL	10.0 mg/m³ TWA
Manganese-EDTA, Mn-EDTA	
Czech Republic OEL	1 mg/m³ TWA
Ireland	TWA: 0.2 mg/m ³
Disodium octaborate tetrahydrate	
Spain OEL - Time Weighted Average (TWA): TWA: 2 mg/m ³	
Copper-EDTA; Cu-EDTA	
Austria	STEL 4 mg/m ³
	STEL 0.4 mg/m ³
	TWA: 1 mg/m ³
	TWA: 0.1 mg/m ³
Australia TWA	N.A.
Finland	TWA: 1 mg/m ³
Sodium molybdate; Na2MoO4+2H2O	
Austria	STEL 10 mg/m ³
	TWA: 5 mg/m ³
Czech Republic OEL	5 mg/m³ TWA
Denmark	TWA: 5 mg/m ³
Finland	TWA: 0.5 mg/m ³

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France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 5 mg/m³ STEL: 10 mg/m³
Ireland	TWA: 10 mg/m³ TWA: 0.5 mg/m³
Norway	TWA: 5 mg/m³ STEL: 10 mg/m³
Poland	STEL: 10 mg/m³ TWA: 4 mg/m³
Portugal	TWA: 0.5 mg/m ³
Spain OEL - Time Weighted Average (TWA):	TWA: 0.5 mg/m ³
Sweden - OEL - 8 Hour	5 mg/m³ LLV
Switzerland	TWA: 5 mg/m ³
UK oes/mel:	TWA: 5 mg/m ³

Derived No Effect Level (DNEL)

No data available

Predicted No Effect Concentration (PNEC)

No data available.

8.2. Exposure controls

Engineering Measures to Reduce Ensure adequate ventilation, especially in confined areas.

Exposure:

Personal protective equipment

Eye/Face Protection: Wear face-shield and protective suit for abnormal processing problems.

Hand protection: Nitrile rubber (0.26 mm). Break through time. > 8 h.

Respiratory Protection: In case of insufficient ventilation wear suitable respiratory equipment.

Skin and Body Protection: Lightweight protective clothing

Hygiene Measures: Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away

from food, drink and animal feeding stuffs.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State: liquid

Appearance:aqueous solutionOdor:Not significant

pH: 6.5

Melting Point/Freezing Point: no data available **Boiling Point/Range:** no data available. Flash Point: no data available, no data available. **Evaporation Rate:** Non-flammable Flammability (solid, gas): no data available. Vapor Pressure: Vapor Density: no data available. **Specific Gravity:** no data available Water Solubility: Soluble in water Solubility(ies) no data available **Partition Coefficient:** no data available. **Autoignition Temperature:** Not Applicable **Decomposition Temperature:** no data available

Explosive Properties: Doesn't present explosion hazard. Based on data of ingredients.

9.2. Other information

Bulk density: no data available

Section 10: STABILITY AND REACTIVITY

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10.1. Reactivity

Not reactive.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous Decomposition Products:

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

Possibility of Hazardous Reactions:

None under normal processing.

10.4. Conditions to avoid

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

10.5. Incompatible materials

10.6. Hazardous decomposition products

None under normal processing.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute Toxicity
Product Information:

Inhalation: May cause irritation of respiratory tract.

Eye Contact: May cause irritation. **Skin Contact:** May cause irritation.

Ingestion: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Unknown Acute Toxicity: 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral): 2,101.00 mg/kg

Component Information:

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ammonium Nitrate; NH4NO3	= 2217 mg/kg (Rat)		> 88.8 mg/L (Rat)4 h
Disodium octaborate tetrahydrate	= 2500 mg/kg (Rat)		
Sodium molybdate; Na ₂ MoO ₄ +2H ₂ O	= 4233 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 2080 mg/m³ (Rat) 4 h

Skin Corrosion or IrritationSee also section 3.Serious Eye Damage or Eye IrritationSee also section 3.SensitizationSee also section 3.Mutagenic effectsSee also section 3.

Carcinogenicity The table below indicates whether each agency has listed any

ingredient as a carcinogen.

Reproductive Toxicity

Teratogenicity

No known effects under normal use conditions.

STOT - Single Exposure

No known effects under normal use conditions.

STOT - Repeated ExposureNone under normal use conditions.

Aspiration Hazard None under normal use.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Do not allow product to enter the environment uncontrolled.

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Ingredients	Algae/aquatic plants	Fish	Crustacea
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Urea	> 10000: 192 h Scenedesmus	16200 - 18300: 96 h Poecilia	3910: 48 h Daphnia magna mg/L
	quadricauda mg/L EC50	reticulata mg/L LC50	EC50 Static
Citric acid; C ₆ H ₈ O ₇		1516: 96 h Lepomis macrochirus mg/L LC50 static	

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Ingredients	LOGPOW
Urea	-1.59
Citric acid; C ₆ H ₈ O ₇	-1.72
Ammonium Nitrate; NH₄NO₃	-3.1

12.4. Mobility in soil

No data available.

12.5. Results of 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: Other Information:

Do not re-use empty containers. Dispose of as unused product.

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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

Transport in bulk according to Annex II of MARPOL 73/78 Not re

and the IBC Code

Not regulated

ADR/RID

14.1

UN-No: Not regulated

14.2

Not regulated

Proper shipping name: 14.3

Hazard Class: Not regulated

14.4

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Packing group: Not regulated

14.5

Environmental Hazard Not regulated

14.6

Special Provisions None

IATA

14.1

ŪN-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

Component	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Ammonium Nitrate; NH₄NO₃ 6484-52-2 (1 - 5%)	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)

National regulations

Belgium

	Belgium - Major Accidents - Qualifying Quantities for Accident Prevention
nitrate in which the Nitrogen content due to Ammonium nitrate is >28% by weight containing <=0.2 % combustible material, >24.5% and <28% by weight containing <=0.4% combustible material and to aqueous Ammonium nitrate solutions in which the concentration of Ammonium nitrate	350 tonne (Note 3, applies to Ammonium nitrate in which the Nitrogen content due to Ammonium nitrate is >28% by weight containing <=0.2 % combustible material, >24.5% and <28% by weight containing <=0.4% combustible material and to aqueous Ammonium nitrate solutions in which the concentration of Ammonium nitrate is >80% by weight)

Denmark

Danish Sikkerhedsgruppe Not regulated

<u>France</u>

ICPE Not regulated

Germany

Gefahrstoffverordnung (Germany) TRGS 511 CIII LGK (Germany) Exempt

Water Endangering Class (WGK): 1 (Everris classification)

Component	German WGK Section
Urea	class 1
57-13-6 (10 - 25%)	
Citric acid; C ₆ H ₈ O ₇	class 1
77-92-9 (10 - 25%)	

Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (1 - 5%)	class 1
Sodium molybdate; $Na_2MoO_4+2H_2O$ 7631-95-0 (< 0.1%)	class 1

European Union

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

15.2 Chemical safety assessment

Not required. Substance(s) usage is covered according to Reach regulation 1907/2006.

Section 16: OTHER INFORMATION

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

H360 - May damage fertility or the unborn child

H302 - Harmful if swallowed

H314 - Causes severe skin burns and eye damage

H319 - Causes serious eye irritation H272 - May intensify fire; oxidizer

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 statement: CLP (EU) specific hazard statement.

Classification procedure: - Calculation method

- Expert judgment and weight of evidence determination

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Key literature references and sources for data

According to EC Regulation 1907/2006 (Reach), Regulation EU

No. 453/2010. Regulation (EC) No 1272/2008.

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

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Reason for revision: *** Indicates changes since the last revision. This version

replaces all previous versions.

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

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End of Safety Data Sheet