

Safety Data Sheet

Issue Date: 24-Feb-2015

Revision Date: 07-Mar-2017

Version: 3.02

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 [SU 21].

1.3. Details of the supplier of the safety data sheet

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 [CLP]

2.2. Label elements

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

Signal Word:

None

EUH210 - Safety data sheet available on request

Precautionary Statements:

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

Chemical Name	EC-No.	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Urea	200-315-5	57-13-6	10 - 25%	Not classified	01-2119463277-33
Citric acid; C ₆ H ₈ O ₇	201-069-1	77-92-9	10 - 25%	Eye Irrit. 2 (H319)	01-2119457026-42
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%	Repr. 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:	If not breathing, give artificial respiration. If symptoms persist, call a physician. Move to fresh air in case of accidental inhalation of vapours or decomposition products.
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. 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.
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. If material is uncontaminated, collect and reuse as recommended for product.

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 bags should be closed well. Exempt
Store in original container.

LGK (Germany)

Packaging Materials:

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

<i>Urea</i>	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m ³ TWA
Latvia - Occupational Exposure Limits - TWAs	10 mg/m ³ TWA
Norway	TWA: 30 µg Hg/g Creatinine STEL: 30 µg Hg/g Creatinine
<i>Citric acid; C₆H₈O₇</i>	
greece OEL 15 minute	1
<i>Ammonium Nitrate; NH₄NO₃</i>	
Australia TWA	N.A.
Czech Republic OEL	10.0 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 TWA	N.A.
Finland	TWA: 1 mg/m ³
<i>Sodium molybdate; Na₂MoO₄+2H₂O</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
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Ireland	TWA: 10 mg/m ³ TWA: 0.5 mg/m ³ STEL: 30 mg/m ³ STEL: 1.5 mg/m ³

Norway	TWA: 5 mg/m ³ STEL: 5 mg/m ³
Poland	STEL: 10 mg/m ³ TWA: 4 mg/m ³
Portugal	TWA: 0.5 mg/m ³
Spain OEL - Time Weighted Average (TWA):	TWA: 0.5 mg/m ³
Switzerland	TWA: 5 mg/m ³
UK oes/mel:	TWA: 5 mg/m ³

Derived No Effect Level (DNEL).

Component	Oral	Dermal	Inhalation:
Urea 57-13-6 (10 - 25%)		580 mg/kg bw/day	292 mg/m ³
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (1 - 5%)	36 mg/m ³	5.12 mg/kg bw/day	8.9 mg/m ³

Predicted No Effect Concentration (PNEC).

Component	Fresh Water	Freshwater sediment	Sea Water	Sea sediment	Soil	Impact on Sewage Treatment
Urea 57-13-6 (10 - 25%)	0.47 mg/l		0.047 mg/l			
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (1 - 5%)						18 mg/l

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

Wear face-shield and protective suit for abnormal processing problems.

Hand protection:

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

Respiratory Protection:

No personal respiratory protective equipment normally required

Skin and Body Protection:

Lightweight protective clothing

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

Physical State:	liquid
Appearance:	aqueous solution
Odor:	Not significant
Bulk density:	no data available
pH:	6.5
Melting Point/Freezing Point:	no data available
Boiling Point/Range:	no data available,
Flash Point:	no data available,
Evaporation Rate:	no data available,
Flammability (solid, gas):	Non-flammable
Vapor Pressure:	no data available,
Vapor Density:	no data available,
Specific Gravity:	no data available
Water Solubility:	
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

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 bags 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

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

Product Information

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:

Symptoms: No information available

Acute Toxicity

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

ATEmix (oral): 2,101.00 mg/kg

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

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Urea	= 8471 mg/kg (Rat)		
Citric acid; C ₆ H ₈ O ₇	= 3 g/kg (Rat) = 3000 mg/kg (Rat)		
Ammonium Nitrate; NH ₄ NO ₃	= 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/m ³ (Rat) 4 h

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

No additional information available

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 effects:

Do not allow product to enter the environment uncontrolled.

Unknown Aquatic Toxicity:

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

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Urea	> 10000: 192 h Scenedesmus quadricauda mg/L EC50	16200 - 18300: 96 h Poecilia reticulata mg/L LC50	-	3910: 48 h Daphnia magna mg/L EC50 Static 10000: 24 h Daphnia magna Straus mg/L EC50
Citric acid; C ₆ H ₈ O ₇	-	1516: 96 h Lepomis macrochirus mg/L LC50 static	-	120: 72 h Daphnia magna mg/L EC50
Ammonium Nitrate; NH ₄ NO ₃	-	65 - 85: 48 h Cyprinus carpio mg/L LC50 semi-static	-	-

12.2. Persistence and degradability

Persistence and Degradability: No information available.

12.3. Bioaccumulative potential

Bioaccumulation: No information available.

Chemical Name	LOGPOW
Urea	-1.59
Citric acid; C ₆ H ₈ O ₇	-1.72
Ammonium Nitrate; NH ₄ NO ₃	-3.1

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

12.6. Other adverse effects

Mobility: No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of Wastes:

Disposal should be in accordance with applicable regional,

Contaminated Packaging: national and local laws and regulations.
Other Information: Do not re-use empty containers. Dispose of as unused product.
 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 and the IBC Code Not regulated

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

Component	Belgium - Major Accidents - Qualifying Quantities for Safety Reporting	Belgium - Major Accidents - Qualifying Quantities for Accident Prevention
Ammonium Nitrate; NH ₄ NO ₃	2500 tonne (Note 3, applies to Ammonium	350 tonne (Note 3, applies to Ammonium

6484-52-2 (1 - 5%)	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)	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

No data available

France

ICPE

Not regulated

Germany

LGK (Germany)

Water Endangering Class (WGK):

Gefahrstoffverordnung (Germany) TRGS 511

Exempt

1 (Everris classification)

CIII

Component	German WGK Section
Urea 57-13-6 (10 - 25%)	class 1
Citric acid; C ₆ H ₈ O ₇ 77-92-9 (10 - 25%)	class 1
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (1 - 5%)	class 1
Manganese-EDTA, Mn-EDTA 15375-84-5 (< 0.1%)	class 2
Copper-EDTA; Cu-EDTA 14025-15-1 (< 0.1%)	class 2
Sodium molybdate; Na ₂ MoO ₄ +2H ₂ O 7631-95-0 (< 0.1%)	class 1

European Union**REACH:**

Component	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Ammonium Nitrate; NH ₄ NO ₃ 6484-52-2 (1 - 5%)	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)

15.2 Chemical safety assessment

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

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

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

Key literature references and sources for data

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

Prepared by:

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

Issue Date:

24-Feb-2015

Revision Date:

07-Mar-2017

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

Disclaimer

This information contained herein is, to the best of Everris' knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Everris shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Everris shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.