Safety Data Sheet

Issue Date: 17-Mar-2014 **Revision Date:** 25-Oct-2016 **Version:** 4.02

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

1.1. Product identifier

Product Name: **Solinure GT 10-5-39+2MgO+TE**
Product Code **29190325GA**
Synonyms: **Solinure GT 10-2.2-32.4+1.2Mg+TE**

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

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

Eye Irritation	Category 1 - (H318)
Oxidizing solids	Category 3 - (H272)

2.2. Label elements
Contains Potassium sulphate; K_2SO_4



Signal Word:
Danger

Hazard Statements:
H318 - Causes serious eye damage
H272 - May intensify fire; oxidizer

Precautionary Statements - EU (§28, 1272/2008)
P280 - Wear eye protection/ face protection
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 CENTER or doctor/physician
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P221 - Take any precaution to avoid mixing with combustibles
P501 - Dispose of container in accordance with local regulation

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
Potassium Nitrate; KNO_3	231-818-8	7757-79-1	65 - 80%	Ox. Sol. 3 (H272)	01-2119488224-35
Potassium sulphate; K_2SO_4	231-915-5	7778-80-5	10 - 25%	Eye Dam. 1 (H318)	01-2119489441-34
Iron EDTA; 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%	Not classified	01-2119493600-40
Boric Acid; H_3BO_3	233-139-2	10043-35-3	< 0.1%	Repr. 1B (H360FD)	01-2119486683-25
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; $Na_2MoO_4+2H_2O$	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: Possible symptoms are coughing and/or dyspnoea. If not breathing, give artificial respiration. If symptoms persist, call a physician.

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: Possible symptoms are nausea and/or vommiting. Clean mouth with water and drink afterwards plenty of water. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Consult a physician if necessary.

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:
Flooding quantities of water.

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. The product itself does not burn. May intensify fire; oxidizer.

5.3. Advice for firefighters
Coordinate fire extinguishing measures to fire in surrounding area.

Hazchem code: 1Y

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Personal Precautions: Ensure adequate ventilation. Avoid dust formation. Use personal protective equipment. Wear personal protective equipment.
For Emergency Responders: Use personal protection recommended in Section 8.

6.2. Environmental precautions
Prevent product from entering drains. Do not contaminate surface water.

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: Shovel or sweep up. Do not create a powder cloud by using a brush or compressed air. Prevent product from entering drains.

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 containers dry and tightly closed to avoid moisture absorption and contamination. Keep away from food, drink and animal feeding stuffs. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well. Keep at temperatures between 0 °C and 40 °C.
LGK (Germany) 5.1B
Packaging Materials: Bags or Bulk.

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

Potassium Nitrate; KNO_3	
Australia TWA	> 10 mg/m³
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA
Latvia - Occupational Exposure Limits - TWAs	5 mg/m³ TWA
Potassium sulphate; K_2SO_4	
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA
Iron EDTA; Fe-EDTA	
Denmark	TWA: 1 mg/m³
Finland	TWA: 1 mg/m³
Portugal	TWA: 1 mg/m³

Spain OEL - Time Weighted Average (TWA):	TWA: 1 mg/m³
Switzerland	TWA: 1 mg/m³
Manganese-EDTA, Mn-EDTA	
Czech Republic OEL	1 mg/m³ TWA
Ireland	TWA: 0.2 mg/m³ STEL: 0.6 mg/m³
Boric Acid; H_3BO_3	
Australia TWA	12 mg/m³
Belgium - 8 Hr TWA	2 mg/m³ TWA borate
Bulgaria - Occupational Exposure Limits - TWAs	5.0 mg/m³ TWA (as B, listed under Boron and its inorganic compounds)
Latvia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA
Portugal	STEL: 6 mg/m³ TWA: 2 mg/m³
Spain OEL - Time Weighted Average (TWA):	STEL: 6 mg/m³ TWA: 2 mg/m³
Switzerland	STEL: 10 mg/m³ TWA: 10 mg/m³
Copper-EDTA; Cu-EDTA	
Austria	STEL 4 mg/m³ STEL 0.4 mg/m³ TWA: 1 mg/m³ TWA: 0.1 mg/m³
Australia TWA	N.A.
Finland	TWA: 1 mg/m³
Sodium molybdate; $Na_2MoO_4+2H_2O$	
Austria	STEL 10 mg/m³ TWA: 5 mg/m³
Czech Republic OEL	5 mg/m³ TWA
Denmark	TWA: 5 mg/m³
Finland	TWA: 0.5 mg/m³
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 STEL: 30 mg/m³ STEL: 1.5 mg/m³
Norway	TWA: 5 mg/m³ STEL: 5 mg/m³
Poland	STEL: 10 mg/m³ TWA: 4 mg/m³
Portugal	TWA: 0.5 mg/m³
Spain OEL - Time Weighted Average (TWA):	TWA: 0.5 mg/m³
Switzerland	TWA: 5 mg/m³
UK oes/mel:	TWA: 5 mg/m³

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face Protection No special protective equipment required.

Skin and body protection No special protective equipment required.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. 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:	Solid
Appearance:	Crystals, powder
Color:	light brown.
Odor:	Not significant
Bulk density:	+/- 1200 kg/m^3
pH:	4.5 @ 21°C (@ 200 g/l)
Melting Point/Freezing Point:	no data available
Boiling Point/Range:	Solid, Not Applicable
Flash Point:	Solid, Not Applicable
Evaporation Rate:	Solid, Not Applicable
Flammability (solid, gas):	Non-flammable
Vapor Pressure:	Solid, Not Applicable
Vapor Density:	Solid, Not Applicable
Specific Gravity:	no data available
Water Solubility:	Soluble in water
Solubility(ies)	no data available
Partition Coefficient:	Solid, Not Applicable
Autoignition Temperature:	Not Applicable
Decomposition Temperature:	no data available
Explosive Properties:	Doesn't present explosion hazard. Based on data of ingredients.
Oxidizing Properties:	May intensify fire; oxidizer.

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

Possibility of hazardous reactions

None under normal processing.

Hazardous Decomposition Products:

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

None known based on information supplied.

10.6. Hazardous decomposition products

None under normal processing.

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

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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.

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): 41,772.00 mg/kg

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

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium Nitrate; KNO_3	= 3015 mg/kg (Rat)	> 2000 mg/kg	> 527 mg/m³
Potassium sulphate; K_2SO_4	= 6600 mg/kg (Rat)	> 2000 mg/kg (Rat)	
Iron EDTA; Fe-EDTA	= 5 g/kg (Rat) > 5000 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 2.05 g/m³ (Rat) 4 h
Boric Acid; H_3BO_3	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h
Sodium molybdate; $Na_2MoO_4+2H_2O$	= 4233 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 2080 mg/m³ (Rat) 4 h

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

skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ Cell Mutagenicity No information available.

Carcinogenicity No information available.

Reproductive Toxicity No information available.

STOT - Single Exposure No information available.

STOT - Repeated Exposure No information available.

Aspiration Hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity 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.

Ingredients	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Potassium sulphate; K_2SO_4	2900: 72 h Desmodesmus subspicatus mg/L EC50	653: 96 h Lepomis macrochirus mg/L LC50 3550: 96 h Lepomis macrochirus mg/L LC50 static 510 - 880: 96 h Pimephales promelas	-	890: 48 h Daphnia magna mg/L EC50

		mg/L LC50 static		
Boric Acid; H_3BO_3	-	1020: 72 h Carassius auratus mg/L LC50 flow-through	-	115 - 153: 48 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

Persistence and Degradability: No information available.

12.3. Bioaccumulative potential

Bioaccumulation: No information available.

Ingredients	LOGPOW
Boric Acid; H_3BO_3	-0.757

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, national and local laws and regulations.

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

Other Information: Use up product completely. Packaging material is industrial waste.

Section 14: TRANSPORT INFORMATION

IMO / IMDG

14.1
UN-No: 1479

14.2
Proper shipping name: Oxidizing solid, N.O.S. (Potassium nitrate)

14.3
Hazard Class: 5.1

14.4
Packing group: III

14.5
Marine Pollutant: Not regulated

14.6
EmS: F-A / S-Q
Special Provisions 223, 274, 900

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: 1479

14.2
Proper shipping name: Oxidizing solid, N.O.S. (Potassium nitrate)
14.3
Hazard Class: 5.1
14.4
Packing group: III
14.5
Environmental Hazard Not regulated
14.6
Special Provisions 274
Tunnel restriction code E
Limited Quantity 5 kg

IATA

14.1
UN-No: 1479
14.2
Proper shipping name: Oxidizing solid, N.O.S. (Potassium nitrate)
14.3
Hazard Class: 5.1
14.4
Packing group: III
14.5
Environmental Hazard Not regulated
14.6
Special Provisions A3



Section 15: REGULATORY INFORMATION

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

Belgium

Denmark
Danish Sikkerhedsgruppe No data available

France
ICPE Classified installation: article 4706

Germany
LGK (Germany) 5.1B
Water Endangering Class (WGK): 1 (Everris classification)
Gefahrstoffverordnung (Germany) TRGS 511 C III

Component	German WGK Section
Potassium Nitrate; KNO_3 7757-79-1 (65 - 80%)	class 1
Potassium sulphate; K_2SO_4 7778-80-5 (10 - 25%)	class 1
Iron EDTA; Fe-EDTA 15708-41-5 (0.1 - 1%)	class 2
Manganese-EDTA, Mn-EDTA 15375-84-5 (< 0.1%)	class 2
Boric Acid; H_3BO_3	class 1

10043-35-3 (< 0.1%)	
Copper-EDTA; Cu-EDTA 14025-15-1 (< 0.1%)	class 2
Sodium molybdate; $Na_2MoO_4+2H_2O$ 7631-95-0 (< 0.1%)	class 1

European Union

REACH:

Component	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Boric Acid; H_3BO_3 10043-35-3 (< 0.1%)	Use restricted. See item 30.

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

Authorizations and/or restrictions on use:
This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants
Not Applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not Applicable.

15.2 Chemical safety assessment
Chemical Safety Report 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
H360FD - May damage fertility. May damage the unborn child
H302 - Harmful if swallowed
H318 - Causes serious eye damage

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

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