

# Safety Data Sheet

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Version: 2

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

### 1.1. Product identifier

Product Name Solinure 5 20-20-20+TE  
 Product Code: 29540325GA  
 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)

Eye Irritation	Category 1 - (H318)
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### 2.2. Label elements



Signal Word: Danger

### Hazard Statements:

H318 - Causes serious eye damage

Contains Potassium sulphate;  $K_2SO_4$

### Precautionary Statements:

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

## 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 nitrate; KNO <sub>3</sub>	231-818-8	7757-79-1	25 - 40%	Ox. Sol. 3 (H272)	01-2119488224-35
Urea	200-315-5	57-13-6	25 - 40%	Not classified	01-2119463277-33
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	231-915-5	7778-80-5	5 - 10%	Eye Dam. 1 (H318)	01-2119489441-34
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

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.

Packaging Materials:  
LGK (Germany)

Store in original container. Store in a closed container.  
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**7.3. Specific end use(s)**

Specific use(s)  
Exposure scenario

Fertilizer; www.everris.com; Read and follow label instructions  
Mixture. Not required.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1. Control parameters**

<i>Potassium nitrate; KNO<sub>3</sub></i>	
Australia	> 10 mg/m <sup>3</sup>
Bulgaria - OEL- TWAs	5.0 mg/m <sup>3</sup> TWA
Latvia - OEL - TWAs	5 mg/m <sup>3</sup> TWA
<i>Urea</i>	
Bulgaria - OEL- TWAs	10.0 mg/m <sup>3</sup> TWA
Latvia - OEL - TWAs	10 mg/m <sup>3</sup> TWA
<i>Potassium sulphate; K<sub>2</sub>SO<sub>4</sub></i>	
Bulgaria - OEL- TWAs	10.0 mg/m <sup>3</sup> TWA
Latvia - OEL - TWAs	10 mg/m <sup>3</sup> TWA
<i>Iron-EDTA-13; Fe-EDTA</i>	
Denmark	TWA: 1 mg/m <sup>3</sup>
Finland	TWA: 1 mg/m <sup>3</sup>
Portugal	TWA: 1 mg/m <sup>3</sup>
Spain - Valores Limite Ambientales - VLE	TWA: 1 mg/m <sup>3</sup>
Switzerland	TWA: 1 mg/m <sup>3</sup>
UK EH40 WEL (8h)	1 mg/m <sup>3</sup> TWA
<i>Manganese-EDTA, Mn-EDTA</i>	
Czech Republic OEL	1 mg/m <sup>3</sup> TWA
Ireland	TWA: 0.2 mg/m <sup>3</sup> STEL: 0.6 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)**

Component	Oral	Dermal	Inhalation
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 25 - 40% )		20.8 mg/kg bw/day	36.7 mg/m <sup>3</sup>
Urea 57-13-6 ( 25 - 40% )		580 mg/kg bw/day	292 mg/m <sup>3</sup>
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub> 7778-80-5 ( 5 - 10% )		21.3 mg/kg bw/day	37.6 mg/m <sup>3</sup>

**Predicted No Effect Concentration (PNEC)**

No data available

Component	Fresh Water	Freshwater sediment	Sea Water	Sea sediment	Soil	Impact on Sewage

						Treatment
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 25 - 40% )	0.45 mg/l		0.045 mg/l			18 mg/l
Urea 57-13-6 ( 25 - 40% )	0.47 mg/l		0.047 mg/l			
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub> 7778-80-5 ( 5 - 10% )	0.68 mg/l		0.068 mg/l			10 mg/l

## 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:

Solid

#### Odor:

None

#### 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):

Not flammable

#### Vapor Pressure:

Solid. Not applicable.

#### Vapour density

Solid. Not applicable.

#### Relative density

No data available

#### Water Solubility:

No data available

#### Solubility(ies)

No data available

#### Partition Coefficient:

Solid. Not applicable.

#### Autoignition Temperature:

No data available

#### Decomposition temperature:

No data available

#### Explosive Properties:

Doesn't present explosion hazard.

### 9.2. Other information

#### VOC Content (%):

Solid. 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):

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

#### Information on Toxicological Effects

None known

#### Acute Toxicity

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

*ATEmix (oral):* 97,937.00 mg/kg

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

Potassium sulphate; K<sub>2</sub>SO<sub>4</sub> (7778-80-5)

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium nitrate; KNO <sub>3</sub>	= 3015 mg/kg ( Rat )	> 2000 mg/kg	> 527 mg/m <sup>3</sup>
Urea	= 8471 mg/kg ( Rat )		
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	= 6600 mg/kg ( Rat )	> 2000 mg/kg ( Rat )	N.E.
Iron-EDTA-13; Fe-EDTA	= 5 g/kg ( Rat ) > 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rat )	> 2.05 g/m <sup>3</sup> ( 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

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

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity

Should not be released into the environment

#### Unknown Aquatic Toxicity

0% of the mixture consists of component(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
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	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 mg/L LC50 static	-	890: 48 h Daphnia magna mg/L EC50

**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
Urea	-1.59

**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**

<b>UN-No:</b> <u>14.2</u>	Not regulated
<b>Proper shipping name:</b> <u>14.3</u>	Not regulated
<b>Hazard Class:</b> <u>14.4</u>	Not regulated
<b>Packing group:</b> <u>14.5</u>	Not regulated
<b>Environmental Hazard</b> <u>14.6</u>	Not regulated
<b>Special Provisions</b>	None

**IATA**

<b>UN-No:</b> <u>14.2</u>	Not regulated
<b>Proper shipping name:</b> <u>14.3</u>	Not regulated
<b>Hazard Class:</b> <u>14.4</u>	Not regulated
<b>Packing group:</b> <u>14.5</u>	Not regulated
<b>Environmental Hazard</b> <u>14.6</u>	Not regulated
<b>Special Provisions</b>	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
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 25 - 40% )	10000 tonne; 5000 tonne	5000 tonne (in cases where this dangerous substance falls within category P5a Flammable liquids or P5b Flammable liquids, then for the purposes of this Regulation the lowest qualifying quantities applies); 1250 tonne

**Denmark**

Denmark No data available

**France**

ICPE Not regulated

**Germany**

LGK (Germany) 13  
 Water Endangering Class (WGK): 1 (Everris classification)  
 Gefahrstoffverordnung (Germany) TRGS 511 Not regulated

Component	German WGK Section
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 25 - 40% )	1
Urea 57-13-6 ( 25 - 40% )	1
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub> 7778-80-5 ( 5 - 10% )	1
Iron-EDTA-13; Fe-EDTA 15708-41-5 ( 0.1 - 1% )	2
Manganese-EDTA, Mn-EDTA 15375-84-5 ( 0.1 - 1% )	2

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
Potassium nitrate; KNO <sub>3</sub> 7757-79-1 ( 25 - 40% )	Present	

### 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

## Section 16: OTHER INFORMATION

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

- H318 - Causes serious eye damage
- 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 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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12-Nov-2015

### 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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