

Safety Data Sheet

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Version: 5

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

1.1. Product identifier

Product Name **Sierrablen 16-25-12**
 Product Code **42800125DB**
 Synonyms **Sierrablen 16-10.9-10**
 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

P332 + P313 - If skin irritation occurs: Get medical advice/attention

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No.	CAS No	Weight %	Classification according	REACH registration
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				Regulation (EC) 1272/2008 [CLP]	number
Urea	200-315-5	57-13-6	10 - 25%	Not classified	01-2119463277-33
Potassium sulphate; K ₂ SO ₄	231-915-5	7778-80-5	10 - 25%	Eye Dam. 1 (H318)	01-2119489441-34
Sulphur; S	231-722-6	7704-34-9	1 - 5%	Skin Irrit. 2 (H315)	01-2119487295-27
Calcium sulphate dihydrate; CaSO ₄ +2H ₂ O	231-900-3	10101-41-4	1 - 5%	Not classified	01-2119444918-26
Calcium carbonate; CaCO ₃	207-439-9	471-34-1	< 0.1%	Not classified	Exempt
Iron sulphate; FeSO ₄ +1H ₂ O	231-753-5	7720-78-7	< 0.1%	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	01-2119513203-57

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 Dusty conditions are unlikely if product is used as intended. However, if prolonged inhalation of dust occurs, remove casualty to fresh air. If symptoms persist, call a physician.

Skin Contact: If a person feels unwell or symptoms of skin irritation appear, consult a physician. Rinse with plenty of water.

Eye Contact: Rinse eyes with water as a precaution. If eye irritation persists, consult a specialist.

Ingestion: If conscious, drink plenty of water. Do NOT induce vomiting. Rinse mouth. Consult a physician if necessary.

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. 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

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. 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 away from heat and sources of ignition. 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 packaging should be closed well. Keep at temperatures between 0 °C and 40 °C.

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)

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>Urea</i>	
Bulgaria - OEL- TWAs	10.0 mg/m ³ TWA
Latvia - OEL - TWAs	10 mg/m ³ TWA
<i>Potassium sulphate; K₂SO₄</i>	
Bulgaria - OEL- TWAs	10.0 mg/m ³ TWA
Latvia - OEL - TWAs	10 mg/m ³ TWA
<i>Sulphur; S</i>	
Latvia - OEL - TWAs	6 mg/m ³ TWA
Russia TWA	6 mg/m ³ TWA 1863
<i>Calcium sulphate dihydrate; CaSO₄+2H₂O</i>	
Belgium - 8 Hr TWA	10 mg/m ³ TWA
Portugal	TWA: 10 mg/m ³
Spain - Valores Limite Ambientales - VLE	TWA: 10 mg/m ³
Switzerland	TWA: 3 mg/m ³
UK EH40 WEL (8h)	10 mg/m ³ TWA (Inhalable) 4 mg/m ³ TWA (Respirable)
<i>Calcium carbonate; CaCO₃</i>	
Australia	10 mg/m ³ TWA inhalable dust
Czech Republic OEL	10.0 mg/m ³ TWA
FR - OEL - 8h VMEs	TWA: 10 mg/m ³
Korea - ISHA - OEL - TWAs	10 mg/m ³ TWA (Serial No. 572)
Latvia - OEL - TWAs	6 mg/m ³ TWA
Poland	TWA: 10 mg/m ³
Portugal	TWA: 10 mg/m ³
Switzerland	TWA: 3 mg/m ³
UK EH40 WEL (8h)	10 mg/m ³ TWA (inhalable) 4 mg/m ³ TWA (respirable)
<i>Iron sulphate; FeSO₄+1H₂O</i>	

Belgium - 8 Hr TWA	1 mg/m ³
Denmark	TWA: 1 mg/m ³
Finland	TWA: 1 mg/m ³
Ireland	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Norway	TWA: 1 mg/m ³ STEL: 2 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)	LTEL (8 hr TWA) 1 mg/m ³ STEL (15 min) 2mg/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
Potassium sulphate; K ₂ SO ₄ 7778-80-5 (10 - 25%)		21.3 mg/kg bw/day	37.6 mg/m ³

Predicted No Effect Concentration (PNEC)

No data available

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			
Potassium sulphate; K ₂ SO ₄ 7778-80-5 (10 - 25%)	0.68 mg/l		0.068 mg/l			10 mg/l

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

Tightly fitting safety goggles

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:

Wear normal, light working clothing

Hygiene Measures:

Follow good housekeeping practices. 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

Appearance:

Granules

Color:

grey, brown, orange.

Odor:

None

Bulk density:930 - 1080 kg/m³**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

No special storage conditions required.

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

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

ATEmix (oral): 28,497.00 mg/kg

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

Potassium sulphate; K₂SO₄ (7778-80-5)

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Urea	= 8471 mg/kg (Rat)		
Potassium sulphate; K ₂ SO ₄	= 6600 mg/kg (Rat)	> 2000 mg/kg (Rat)	N.E.
Sulphur; S	> 3000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 9.23 mg/L (Rat) 4 h
Calcium carbonate; CaCO ₃	= 6450 mg/kg (Rat)		
Iron sulphate; FeSO ₄ +1H ₂ O	= 500 mg/kg (Rat)	= 155 mg/kg (Rat)	

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

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 ₂ SO 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 mg/L LC50 static	-	890: 48 h Daphnia magna mg/L EC50
Sulphur; S	-	866: 96 h Brachydanio rerio mg/L LC50 static 14: 96 h Lepomis macrochirus mg/L LC50 static 180: 96 h Oncorhynchus mykiss mg/L LC50 static	-	-
Iron sulphate; FeSO ₄ +1H ₂ O	-	925: 96 h Poecilia reticulata mg/L LC50 static 0.56: 96 h Cyprinus carpio mg/L LC50 semi-static	-	152: 48 h Daphnia magna mg/L EC50 6.15 - 9.26: 48 h Daphnia magna mg/L EC50 Static

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

<u>12.4. Mobility in soil</u>	No data available.
<u>12.5. PBT and vPvB assessment</u>	No data available.
<u>12.6. Other adverse effects</u>	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

<u>14.1</u>	
UN-No:	Not regulated
<u>14.2</u>	
Proper shipping name:	Not regulated
<u>14.3</u>	
Hazard Class:	Not regulated
<u>14.4</u>	
Packing group:	Not regulated
<u>14.5</u>	
Marine Pollutant:	Not regulated
<u>14.6</u>	
Special Provisions	None
<u>14.7</u>	
Bulk transport according Annex II of MARPOL and IBC Code	No data available

ADR/RID

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

IATA

<u>14.1</u>	
UN-No:	Not regulated
<u>14.2</u>	
Proper shipping name:	Not regulated
<u>14.3</u>	
Hazard Class:	Not regulated
<u>14.4</u>	
Packing group:	Not regulated
<u>14.5</u>	
Environmental Hazard	Not regulated
<u>14.6</u>	
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 Not regulated

Germany

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

Component	German WGK Section
Urea 57-13-6 (10 - 25%)	1
Potassium sulphate; K ₂ SO ₄ 7778-80-5 (10 - 25%)	1
Sulphur; S 7704-34-9 (1 - 5%)	class 1
Calcium sulphate dihydrate; CaSO ₄ +2H ₂ O 10101-41-4 (1 - 5%)	1
Calcium carbonate; CaCO ₃ 471-34-1 (< 0.1%)	NWG
Iron sulphate; FeSO ₄ +1H ₂ O 7720-78-7 (< 0.1%)	1

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

- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- 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 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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