Safety Data Sheet

Issue Date: 20-Feb-2014 **Revision Date:** 19-Jul-2016 **Version:** 1

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

1.1. Product identifier

Product Name: **Sierrablen 28-5-5+Fe**
Product Code **87220125DB**
Synonyms: **Sierrablen 28-2.2-4.1+Fe**

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

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

2.2. Label elements
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

Other hazards (UN-GHS)
H316 - Causes mild skin irritation

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
Urea	200-315-5	57-13-6	40 - 65%	Not classified	01-2119463277-33
Ammonium Nitrate; NH_4NO_3	229-347-8	6484-52-2	10 - 25%	Eye Irrit. 2 (H319) Ox. Sol. 3 (H272)	01-2119490981-27
Sulphur; S	231-722-6	7704-34-9	5 - 10%	Skin Irrit. 2 (H315)	01-2119487295-27
Iron sulphate; $FeSO_4+1H_2O$	231-753-5	7720-78-7	1 - 5%	Skin Irrit. 2 (H315)	01-2119513203-57

				Eye Irrit. 2 (H319) Acute Tox. 4 (H302)	
Wax	601-216-3	112945-52-5	0.1 - 1%	Not classified	01-2119488076-30
Calcium Carbonate; $CaCO_3$	207-439-9	471-34-1	0.1 - 1%	Not classified	Exempt
Calcium sulphate dihydrate; $CaSO_4+2H_2O$	231-900-3	10101-41-4	< 0.1%	Not classified	01-2119444918-26
Magnesium oxide; MgO	215-171-9	1309-48-4	< 0.1%	Not classified	Exempt

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: In case of shortness of breath, give oxygen. Possible symptoms are coughing and/or dyspnoea. Move 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.

Eye Contact: Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

Ingestion: Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. In case of respiratory difficulties practice oxygenotherapy. Possible symptoms are nausea and/or vommiting.

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: Avoid dust formation. Ensure adequate ventilation.

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. Use up product completely. Packaging material is industrial waste.

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 bags should be closed well. Keep at temperatures between 0 °C and 40 °C.
LGK (Germany) Exempt
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

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: 30 µg Hg/g Creatinine
Ammonium Nitrate; NH_4NO_3	
Australia TWA	N.A.
Czech Republic OEL	10.0 mg/m³ TWA
Sulphur; S	
Latvia - Occupational Exposure Limits - TWAs	6 mg/m³ TWA
Russia TWA	6 mg/m³ TWA 1790
Iron sulphate; $FeSO_4+1H_2O$	
Belgium - 8 Hr TWA	1 mg/m³
Denmark	TWA: 1 mg/m³
Finland	TWA: 1 mg/m³
Ireland	TWA: 1 mg/m³ STEL: 2 mg/m³
Norway	TWA: 1 mg/m³ STEL: 1 mg/m³
Portugal	TWA: 1 mg/m³
Spain OEL - Time Weighted Average (TWA):	TWA: 1 mg/m³
Switzerland	TWA: 1 mg/m³
UK oes/mel:	TWA: 1 mg/m³
Wax	
Austria	TWA: 4 mg/m³
Switzerland	TWA: 4 mg/m³
Calcium Carbonate; $CaCO_3$	
Australia TWA	10 mg/m³ TWA inhalable dust
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA
Czech Republic OEL	10.0 mg/m³ TWA

France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 10 mg/m³
Latvia - Occupational Exposure Limits - TWAs	6 mg/m³ TWA
Poland	TWA: 10 mg/m³
Portugal	TWA: 10 mg/m³
Switzerland	TWA: 3 mg/m³
Calcium sulphate dihydrate; $CaSO_4+2H_2O$	
Belgium - 8 Hr TWA	10 mg/m³ TWA
Portugal	TWA: 10 mg/m³
Spain OEL - Time Weighted Average (TWA):	TWA: 10 mg/m³
Switzerland	TWA: 3 mg/m³
Magnesium oxide; MgO	
Austria	STEL 20 mg/m³ STEL 10 mg/m³ TWA: 5 mg/m³ TWA: 10 mg/m³
Australia TWA	10 mg/m³ TWA fume
Belgium - 8 Hr TWA	10 mg/m³
Bulgaria - Occupational Exposure Limits - TWAs	10.0 mg/m³ TWA
Czech Republic OEL	5 mg/m³ TWA
Denmark	TWA: 6 mg/m³
France - Occupational Exposure Limits - 8 Hour VMEs	TWA: 10 mg/m³
Hungary - Occupational Exposure Limits - TWAs	6 mg/m³ TWA
Iceland - OEL - 8 Hour	6 mg/m³ TWA Mg
Ireland	TWA: 4 mg/m³ TWA: 5 mg/m³ TWA: 10 mg/m³ STEL: 10 mg/m³ STEL: 12 mg/m³ STEL: 30 mg/m³
Korea - ISHA - Occupational Exposure Limits - TWAs	10 mg/m³ TWA (Serial No. 272)
Malaysia - Occupational Exposure Limits - TWAs	10 mg/m³ TWA (fume)
Norway	TWA: 10 mg/m³ STEL: 20 mg/m³
Poland	TWA: 10 mg/m³
Portugal	TWA: 10 mg/m³
Romania - Occupational Exposure Limits - TWAs	5 mg/m³ TWA (fume)
Spain OEL - Time Weighted Average (TWA):	TWA: 10 mg/m³
Singapore - OEL:PELs	10 mg/m³ PEL
Switzerland	TWA: 3 mg/m³
UK oes/mel:	STEL: 30 mg/m³ STEL: 12 mg/m³ TWA: 10 mg/m³ TWA: 4 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:	Granules
Color:	orange, grey, brown.
Odor:	Not significant
Bulk density:	800 - 1100 kg/m^3
pH:	no data available
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.

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): 32,468.00 mg/kg

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

Ingredients	LD50 Oral	LD50 Dermal	LC50 Inhalation
Urea	= 8471 mg/kg (Rat)		
Ammonium Nitrate; NH_4NO_3	= 2217 mg/kg (Rat)		> 88.8 mg/L (Rat) 4 h
Sulphur; S	> 3000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 9.23 mg/L (Rat) 4 h
Iron sulphate; $FeSO_4+1H_2O$	= 500 mg/kg (Rat)		
Wax	= 3160 mg/kg (Rat)		
Calcium Carbonate; $CaCO_3$	= 6450 mg/kg (Rat)		

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: 3% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Ingredients	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
Ammonium Nitrate; NH_4NO_3	-	65 - 85: 48 h Cyprinus carpio mg/L LC50	-	-

		semi-static		
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; $FeSO_4+1H_2O$	-	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 information available.

12.3. Bioaccumulative potential

Bioaccumulation: No information available.

Ingredients	LOGPOW
Urea	-1.59
Ammonium Nitrate; NH_4NO_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, 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: 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: Not regulated

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_4NO_3 6484-52-2 (10 - 25%)	2500 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)	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 No data available

France
ICPE Classified installation: article 1331

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

Component	German WGK Section
Urea 57-13-6 (40 - 65%)	class 1
Ammonium Nitrate; NH_4NO_3 6484-52-2 (10 - 25%)	class 1
Sulphur; S 7704-34-9 (5 - 10%)	class 1
Iron sulphate; $FeSO_4+1H_2O$ 7720-78-7 (1 - 5%)	class 1
Magnesium oxide; MgO 1309-48-4 (< 0.1%)	class 1

European Union

REACH:

Component	EU - REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances
Ammonium Nitrate; NH_4NO_3 6484-52-2 (10 - 25%)	Use restricted. See item 58. (Conditions of restrictions 27 June 2010)

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
H319 - Causes serious eye irritation
H272 - May intensify fire; oxidizer
H315 - Causes skin irritation
H302 - Harmful if swallowed
H316 - Causes mild skin irritation

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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