Safety Data Sheet

Revision Date 10-Oct-2019 Version: 3

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

1.1. Product identifier

Product Name Sierraform GT Spring & Summer CalMag

14-0-7+8CaO+5MgO+0.5Fe

Product Code: 40130120DA 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)

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

EU Specific Hazard Statements:

EUH210 - Safety data sheet available on request

Other hazards (UN-GHS)

Causes mild skin irritation Toxic to aquatic life

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No.	CAS No	Weight %	Classification according Regulation (EC) 1272/2008	REACH registration number
				[CLP]	
Iron sulphate; FeSO ₄ +1H ₂ O	231-753-5	7720-78-7	1 - 5%	Skin Irrit. 2 (H315)	01-2119513203-57
				Eye Irrit. 2 (H319)	
				Acute Tox. 4 (H302)	
				·	
Copper sulfate pentahydrate;	231-847-6	7758-99-8	< 0.1%	Skin Irrit. 2 (H315)	01-2119520566-40
CuSO ₄ +5H ₂ O				Eye Irrit. 2 (H319)	
				Acute Tox. 4 (H302)	
				Aquatic Acute 1 (H400)	
				Aquatic Chronic 1 (H410)	

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

<u>Suitable Extinguishing Media:</u> 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

Sierraform GT Spring & Summer CalMag 14-0-7+8CaO+5MgO+0.5Fe

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.

Store in original container. Store in a closed container. Packaging Materials:

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

Iron sulphate; FeSO ₄ +1H ₂ O			
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		
Copper sulfate pentahydrate; CuSO _{4+5H2} O			
Austria	STEL 0.4 mg/m ³		
	TWA: 0.1 mg/m ³		
Finland	TWA: 0.02 mg/m ³		
Poland	TWA: 0.2 mg/m ³		
Switzerland	STEL: 0.2 mg/m ³		
	TWA: 0.1 mg/m ³		

Derived No Effect Level (DNEL)

Predicted No Effect Concentration (PNEC)

No data available

8.2. Exposure controls

Personal protective equipment

Wear eye/face protection **Eye/Face Protection**

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

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

When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding **Hygiene Measures:**

stuffs.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Sierraform GT Spring & Summer CalMag 14-0-7+8CaO+5MgO+0.5Fe

Physical State: Solid Odor: None

No data available **Melting Point/Freezing Point: Boiling Point/Range:** Solid. Not applicable. Flash Point: Solid. Not applicable. Solid. Not applicable. **Evaporation Rate:** 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 Solid. Not applicable. **Partition Coefficient:**

Partition Coefficient:Solid. Not applicateAutoignition Temperature:No data availableDecomposition 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 derivates 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): 25,151.00 mg/kg

Unknown Acute Toxicity: 11.2% of the mixture consists of ingredient(s) of unknown toxicity.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron sulphate; FeSO ₄ +1H ₂ O	= 500 mg/kg (Rat)	= 155 mg/kg (Rat)	
Copper sulfate pentahydrate; CuSO ₄ +5H ₂ O	= 960 mg/kg (Rat)	> 2 g/kg (Rat)> 8 g/kg (Rabbit)	

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

Classification based on individual ingredients of the mixture. 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** 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
Unknown Aquatic Toxicity

Should not be released into the environment 11.2% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
			Microorganisms	
Iron sulphate;	-	925: 96 h Poecilia	-	152: 48 h Daphnia
FeSO ₄ +1H ₂ O		reticulata mg/L LC50		magna mg/L EC50 6.15 -
		static 0.56: 96 h Cyprinus		9.26: 48 h Daphnia
		carpio mg/L LC50		magna mg/L EC50 Static
		semi-static		
Copper sulfate	-	0.66 - 1.15: 96 h Lepomis	-	0.147 - 0.227: 48 h
pentahydrate;		macrochirus mg/L LC50		Daphnia magna mg/L
CuSO ₄ +5H ₂ O		semi-static 0.96 - 1.8: 96		EC50 Static
		h Lepomis macrochirus		
		mg/L LC50 static 0.6752:		
		96 h Pimephales		
		promelas mg/L LC50		
		static 0.09 - 0.19: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 static 0.1478		
		- 0.165: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 flow-through		

12.2. Persistence and degradability

Persistence and Degradability:

No persistent or cumulative effects were observed.

Sierraform GT Spring & Summer CalMag 14-0-7+8CaO+5MgO+0.5Fe

12.3. Bioaccumulative potential

Bioaccumulation: Does not bioaccumulate.

12.4. Mobility in soil No data available.

<u>12.5. PBT and vPvB assessment</u> No data available.

12.6. Other adverse effectsNo 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.

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

14.1

Bulk transport according Annex II of MARPOL and IBC Code No data available

ADR/RID

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

<u>14.3</u>

Hazard Class: Not regulated

14.4

Packing group: Not regulated

14.5

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 No data available

Germany

LGK (Germany) No data available

Component	German WGK Section	
Iron sulphate; FeSO ₄ +1H ₂ O	1	
7720-78-7 (1 - 5%)		
Copper sulfate pentahydrate; CuSO ₄ +5H ₂ O	class 3	
7758-99-8 (< 0.1%)		

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

- H302 Harmful if swallowed
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H400 Very toxic to aquatic life
- H410 Very toxic to aquatic life with long lasting effects

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

Sierraform GT Spring & Summer CalMag 14-0-7+8CaO+5MgO+0.5Fe

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).

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

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Reason for revision

Restrictions on use

Prepared by

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