

Safety Data Sheet

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Last Revision Date 22-Nov-2021

Version: 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name	Osmocote Exact Standard 16-9-12+2MgO+TE
Product Code	8840-225HA
Unique Formula Identifier (UFI)	Not required
REACH registration number	Not applicable
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 (SU21)

Reason why uses advised against Use advised against in Chemical Safety Assessment per REACH Annex I point 7 2.3

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

Non-Emergency Telephone Number +31 (0) 418655700

1.4. Emergency telephone number

IN CASE OF AN EMERGENCY CALL: +44 1235 239 670 (24/7)

Europe	112
Austria	+43 1 406 43 43
Belgium	070 245 245
Denmark	+45 8212 1212
Finland	0800 147 111
France	+ 33 (0)1 45 42 59
Ireland	01 809 2566
Netherlands	088 755 8000 (24/7)
Norway	+45 735 80500
Poland	+48 42 2538 400
Portugal	+351 800 250 250
Spain	+34 91 562 04 20
Sweden	112
Switzerland	Tox Info SW 145 (24h)
United Kingdom	111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Chronic aquatic toxicity	Category 3 - (H412)
--------------------------	---------------------

2.2. Label elements

Hazard statements

H412 - Harmful to aquatic life with long lasting effects

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No (EU Index No)	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH registration number	M-Factor	M-Factor (long-term)
Ammonium nitrate; NH ₄ NO ₃ (6484-52-2)	229-347-8	25 - 40%	Eye irrit. 2 (H319) Ox. Sol. 3 (H272)	Eye Irrit. 2 :: 10%≤C<100%	01-2119490981-27	-	-
Iron sulphate; FeSO ₄ +7H ₂ O (7782-63-0)	616-510-7	1 - 5%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)	Skin Irrit. 2 :: C≥25%	01-2119513203-57	-	-
Copper sulphate anhydrous; CuSO ₄ (7758-98-7)	231-847-6	0.1 - 1%	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	-	01-2119520566-40	10	10
Manganese sulphate; MnSO ₄ (7785-87-7)	232-089-9	0.1 - 1%	STOT RE 2 (H373) Aquatic Chronic 2 (H411)	-	01-2119456624-35	-	-
Disodium tetraborate pentahydrate (12179-04-3)	601-808-1	0.1 - 1%	Repr. 1B (H360FD)	-	01-2119490790-32	-	-

*The exact percentage (concentration) of composition has been withheld as a trade secret

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATE_{mix}) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L
Ammonium nitrate; NH ₄ NO ₃	2217	5000	88.8
Copper sulphate anhydrous; CuSO ₄	300	2000	No data available
Manganese sulphate; MnSO ₄	782	No data available	No data available
Disodium tetraborate pentahydrate	2403	No data available	No data available

Chemical name	CAS No.	SVHC candidates
---------------	---------	-----------------

Disodium tetraborate pentahydrate	12179-04-3	X
-----------------------------------	------------	---

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aid measures should be executed by trained personnel only.
Inhalation	Remove to fresh air. In the case of inhalation of aerosol/mist consult a physician if necessary. If not breathing, give artificial respiration. If symptoms persist, call a physician. Dusty conditions are unlikely if product is used as intended. However, if prolonged inhalation of dust occurs, remove casualty to fresh air.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.
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

Symptoms	None known.
-----------------	-------------

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
---------------------------	------------------------

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In case of fire, the product will smoulder even without the presence of external oxygen. In these conditions the product will show self sustaining decomposition. The best method to extinguish the fire is to cool the decomposition front with water. Thermal decomposition can lead to release of irritating and toxic gases and vapors

Hazardous Combustion Products	Carbon oxides. Phosphorus oxides. Ammonia. Nitrogen oxides (NOx).
--------------------------------------	---

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	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 protective gloves/clothing and eye/face protection.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8. Prevent entry into waterways, sewers, basements or confined areas.

6.2. Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer 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 cleaning up	Take up mechanically, placing in appropriate containers for disposal. Use up product completely. Packaging material is industrial waste.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.
------------------------------------	--

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes. Avoid generation of dust. In case of insufficient ventilation, wear suitable respiratory equipment.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	KEEP OUT OF REACH OF CHILDREN AND PETS. 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 frost.
Packaging materials	Keep in original container, tightly closed in a safe place.

7.3. Specific end use(s)

Specific use(s)	Fertilizer.
Exposure scenario	Mixture. Not required.
Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
Other Information	

LGK (Germany) TRGS 510 13

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Iron sulphate; FeSO ₄ +7H ₂ O	-	-	TWA: 1 mg/m ³	TWA: 1.0 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Copper sulphate anhydrous; CuSO ₄	-	TWA: 1 mg/m ³ TWA: 0.1 mg/m ³ STEL 4 mg/m ³ STEL 0.4 mg/m ³	-	TWA: 1.0 mg/m ³	-
Manganese sulphate; MnSO ₄	-	TWA: 0.2 mg/m ³ STEL 1.6 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³
Disodium tetraborate pentahydrate	-	-	TWA: 2 mg/m ³ STEL: 6 mg/m ³	TWA: 5.0 mg/m ³	TWA: 1 mg/m ³
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Ammonium nitrate; NH ₄ NO ₃	-	TWA: 10.0 mg/m ³	-	-	-
Iron sulphate; FeSO ₄ +7H ₂ O	-	-	TWA: 1 mg/m ³ STEL: 2 mg/m ³	-	TWA: 1 mg/m ³
Copper sulphate anhydrous; CuSO ₄	-	-	-	TWA: 1 mg/m ³ TWA: 0.2 mg/m ³	TWA: 0.02 mg/m ³
Manganese sulphate; MnSO ₄	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 1 mg/m ³ Ceiling: 2 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³ STEL: 0.4 mg/m ³ STEL: 0.1 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.02 mg/m ³ TWA: 0.2 mg/m ³
Disodium tetraborate pentahydrate	-	-	TWA: 1 mg/m ³ STEL: 2 mg/m ³	-	-
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary
Iron sulphate; FeSO ₄ +7H ₂ O	-	-	-	TWA: 1 mg/m ³ STEL: 2 mg/m ³	-
Copper sulphate anhydrous; CuSO ₄	-	-	TWA: 0.01 mg/m ³ Peak: 0.02 mg/m ³	-	TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³
Manganese sulphate; MnSO ₄	-	TWA: 0.2 mg/m ³ TWA: 0.02 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.02 mg/m ³ Peak: 1.6 mg/m ³ Peak: 0.16 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³
Disodium tetraborate pentahydrate	TWA: 1 mg/m ³	-	TWA: 5 mg/m ³ Peak: 5 mg/m ³	TWA: 10 mg/m ³	-
Chemical name	Italy MDLPS	Latvia	Lithuania	Luxembourg	Netherlands
Copper sulphate anhydrous; CuSO ₄	-	TWA: 0.5 mg/m ³	TWA: 1 mg/m ³ TWA: 0.2 mg/m ³	-	TWA: 0.1 mg/m ³
Manganese sulphate; MnSO ₄	TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³
Chemical name	Norway	Poland	Portugal	Romania	Slovakia
Iron sulphate; FeSO ₄ +7H ₂ O	TWA: 1 mg/m ³ STEL: 3 mg/m ³	-	TWA: 1 mg/m ³	-	-
Copper sulphate anhydrous; CuSO ₄	-	TWA: 0.2 mg/m ³	-	-	TWA: 1 mg/m ³ TWA: 0.2 ppm
Manganese sulphate; MnSO ₄	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³ STEL: 0.6 ppm STEL: 0.15 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	TWA: 0.2 mg/m ³
Disodium tetraborate pentahydrate	-	-	TWA: 2 mg/m ³ STEL: 6 mg/m ³	-	-
Chemical name	Slovenia	Spain	Sweden	Switzerland	United Kingdom
Iron sulphate; FeSO ₄ +7H ₂ O	-	TWA: 1 mg/m ³	-	TWA: 1 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Copper sulphate anhydrous; CuSO ₄	-	TWA: 0.01 mg/m ³	NGV: 0.01 mg/m ³	TWA: 0.1 mg/m ³ STEL: 0.2 mg/m ³	TWA: 1 mg/m ³ STEL: 2 mg/m ³
Manganese sulphate; MnSO ₄	TWA: 0.05 mg/m ³ STEL: 0.4 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³	NGV: 0.2 mg/m ³ NGV: 0.05 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.1 mg/m ³	TWA: 0.2 mg/m ³ TWA: 0.05 mg/m ³

					STEL: 0.6 mg/m ³ STEL: 0.15 mg/m ³
Disodium tetraborate pentahydrate	-	TWA: 2 mg/m ³ STEL: 6 mg/m ³	-	-	TWA: 1 mg/m ³ STEL: 3 mg/m ³

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Manganese sulphate; MnSO ₄	-	20 µg/L (blood - whole blood not provided) (-)	-	-	-
Chemical name	Denmark	Finland	France	Germany DFG	Germany TRGS
Manganese sulphate; MnSO ₄	-	-	-	15 µg/L - BAR (end of exposure or end of shift) blood 15 µg/L - BAR (for long-term exposures: at the end of the shift after several shifts) blood	-

Derived No Effect Level (DNEL)

No information available.

Predicted No Effect Concentration (PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

Wear normal, light working clothing

Eye/face protection

Wear safety glasses with side shields (or goggles).

Hand protection

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

Skin and body protection

Lightweight protective clothing.

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. Prevent product from entering drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Solid

Appearance:

Granules

Color:

blue, green, Brown, red

Odor:

Fertilizer.

Property

Values

Remarks • Method

Melting Point/Freezing Point:

No data available

None known

Boiling Point/Range:

No data available

None known

Flammability (solid, gas):

No data available

None known

Flammability Limits in Air:

Not applicable

None known

Upper Flammability Limit:

Not applicable

Lower Flammability Limit:

Not applicable

Flash Point:

No data available

None known

Autoignition Temperature:	No data available	None known
Decomposition Temperature:		None known
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Kinematic Viscosity:	No data available	None known
Dynamic Viscosity:	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition Coefficient:	No data available	None known
Vapor Pressure:	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Density:	No data available	
Vapour density	No data available	None known
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

9.2. Other information Not applicable

9.2.1. Information with regard to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Not reactive.

10.2. Chemical stability

Stability Stable under normal conditions.

Specific methods:

Sensitivity to mechanical impact Not sensitive.
Sensitivity to static discharge Not sensitive.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

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

Hazardous Decomposition Products None under normal use conditions. 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 hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. Inhalation of dust in high concentration may cause irritation of respiratory system.
Eye contact	Specific test data for the substance or mixture is not available. May cause irritation.
Skin contact	May cause irritation.
Ingestion	May cause gastrointestinal discomfort if consumed in large amounts.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral) 25,252.50 mg/kg

0 % of the mixture consists of ingredient(s) of unknown toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ammonium nitrate; NH ₄ NO ₃	= 2217 mg/kg (Rat)	> 5000 mg/kg (Rat)	> 88.8 mg/L (Rat) 4 h
Iron sulphate; FeSO ₄ +7H ₂ O	= 1520 mg/kg	-	-
Copper sulphate anhydrous; CuSO ₄	= 300 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Manganese sulphate; MnSO ₄	= 782 mg/kg (Rat)	-	> 4.45 mg/L (Rat) 4 h
Disodium tetraborate pentahydrate	= 2403 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	Based on available data, the classification criteria are not met.
Germ cell mutagenicity	Based on available data, the classification criteria are not met.
Carcinogenicity	Based on available data, the classification criteria are not met.
Reproductive toxicity	Based on available data, the classification criteria are not met.

Chemical name	European Union
Disodium tetraborate pentahydrate 12179-04-3	Repr. 1B

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

STOT - single exposure Based on available data, the classification criteria are not met.
STOT - repeated exposure Based on available data, the classification criteria are not met
Aspiration hazard Based on available data, the classification criteria are not met
Endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Unknown aquatic toxicity

Contains 6 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Copper sulphate anhydrous; CuSO ₄	-	LC50: =0.1mg/L (96h, Oncorhynchus mykiss)	-	EC50: 0.0058 - 0.0073mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and Degradability: No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient
Ammonium nitrate; NH ₄ NO ₃	-3.1

12.4. Mobility in soil

Mobility in soil no data available.

Mobility no data available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Ammonium nitrate; NH ₄ NO ₃	The substance is not PBT / vPvB PBT assessment does not apply Further information relevant for the PBT assessment is necessary
Copper sulphate anhydrous; CuSO ₄	The substance is not PBT / vPvB PBT assessment does not apply
Manganese sulphate; MnSO ₄	The substance is not PBT / vPvB PBT assessment does not apply

12.6. Endocrine disrupting properties This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects

. No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused Dispose of in accordance with local regulations. Dispose of waste in accordance with

products	environmental legislation.
Contaminated packaging	Do not reuse empty containers.
Other Information	Use up product completely. Packaging material is industrial waste. If material is uncontaminated, collect and reuse as recommended for product.

SECTION 14: Transport information

IMDG

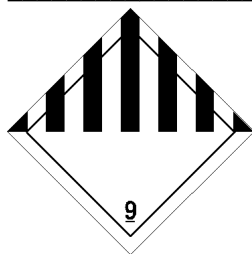
<u>14.1</u>	
UN-No:	2071
<u>14.2</u>	
Proper shipping name:	AMMONIUM NITRATE BASED FERTILIZER
<u>14.3</u>	
Transport hazard class(es)	9
<u>14.4</u>	
Packing group:	III
<u>14.5</u>	
Marine Pollutant:	Not regulated
Chemical name	IMDG - Marine Pollutants
Copper sulphate anhydrous; CuSO ₄	IMDG regulated marine pollutant (Listed in the index, listed under Copper sulphate, anhydrous, hydrates and solution)
<u>14.6</u>	
EmS:	F-H / S-Q
Special Provisions	186, 193
<u>14.7</u>	
Bulk transport according Annex II of MARPOL and IBC Code	No data available

ADR

<u>14.1</u>	
UN-No:	Not regulated
<u>14.2</u>	
Proper shipping name:	Not regulated
<u>14.3</u>	
Transport hazard class(es)	Not regulated
<u>14.4</u>	
Packing group:	Not regulated
<u>14.5</u>	
Environmental hazards	Not regulated
<u>14.6</u>	
Special Provisions	None

IATA

<u>14.1</u>	
UN number or ID number	2071
<u>14.2</u>	
Proper shipping name:	AMMONIUM NITRATE BASED FERTILIZER
<u>14.3</u>	
Transport hazard class(es)	9
<u>14.4</u>	
Packing group	III
<u>14.5</u>	
Environmental hazards	Not regulated
<u>14.6</u>	
Special Provisions	A89, A90



SECTION 15: Regulatory information

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

National regulations

Denmark

Sikkerhedsgruppe DK

B

France

ICPE

Classified installation: article 4702

Germany

LGK (Germany) TRGS 510

13

Gefahrstoffverordnung (Germany) TRGS 511

B II

Water hazard class (WGK)

slightly hazardous to water (WGK 1)

Chemical name	German WGK Section
Ammonium nitrate; NH_4NO_3	Reg. no. 212, hazard class 1 - slightly hazardous to water
Iron sulphate; $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$	3
Copper sulphate anhydrous; CuSO_4	Reg. no. 141, hazard class 3 - highly hazardous to water
Manganese sulphate; MnSO_4	Reg. no. 522, hazard class 2 - obviously hazardous to water
Disodium tetraborate pentahydrate	Reg. no. 37, hazard class 1 - slightly hazardous to water

Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Mutagens	Netherlands - List of Reproductive Toxins
Manganese sulphate; MnSO_4	-	-	Fertility Category 2 Development Category 2
Disodium tetraborate pentahydrate	-	-	Fertility Category 1B Development Category 1B

European Union

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.

Take note of Directive 94/33/EC on the protection of young people at work

Not to be used by professional users below 18 years of age, see the National Working Environment Authorities Executive Order on young peoples dangerous work.

Authorizations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Chemical name	Restricted substance per REACH	Substance subject to authorization
---------------	--------------------------------	------------------------------------

	Annex XVII	per REACH Annex XIV
Ammonium nitrate; NH ₄ NO ₃	58.	-
Iron sulphate; FeSO ₄ ·7H ₂ O	75.	-
Copper sulphate anhydrous; CuSO ₄	75.	-
Disodium tetraborate pentahydrate	30. 75.	-

REGULATION (EU) 2019/1148 on the marketing and use of explosives precursors

Chemical name	REGULATION (EU) 2019/1148 on the marketing and use of explosives precursors
Ammonium nitrate; NH ₄ NO ₃	Present (16% by weight of N in relation to AN or higher)

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

Persistent Organic Pollutants Not applicable

Named dangerous substances per Seveso Directive (2012/18/EU)

Chemical name	Lower-tier requirements (tons)	Upper-tier requirements (tons)
Ammonium nitrate; NH ₄ NO ₃	350	2500 5000

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

EU - Plant Protection Products (1107/2009/EC)

Chemical name	EU - Plant Protection Products (1107/2009/EC)
Iron sulphate; FeSO ₄ ·7H ₂ O	Plant protection agent

Biocidal Products Regulation (EU) No 528/2012 (BPR)

Chemical name	Biocidal Products Regulation (EU) No 528/2012 (BPR)
Copper sulphate anhydrous; CuSO ₄	Product type 2
Disodium tetraborate pentahydrate	8 - Wood preservatives

International Inventories:

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances
- AICS** - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report Substance(s) usage is covered according to Reach regulation 1907/2006

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

- H272 - May intensify fire; oxidizer
- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H318 - Causes serious eye damage
- H319 - Causes serious eye irritation
- H332 - Harmful if inhaled
- H360 - May damage fertility or the unborn child
- H373 - May cause damage to organs through prolonged or repeated exposure
- H400 - Very toxic to aquatic life
- H410 - Very toxic to aquatic life with long lasting effects
- H411 - Toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:
 PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances
 vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Classification procedure

- Calculation method
- Expert judgment and weight of evidence determination

Classification procedure	
<i>Classification according to Regulation (EC) No. 1272/2008 [CLP]</i>	<i>Method Used</i>
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapor	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitization	Calculation method
Skin sensitization	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

- Agency for Toxic Substances and Disease Registry (ATSDR)
- U.S. Environmental Protection Agency ChemView Database
- European Food Safety Authority (EFSA)
- EPA (Environmental Protection Agency)
- Acute Exposure Guideline Level(s) (AEGl(s))
- U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
- U.S. Environmental Protection Agency High Production Volume Chemicals
- Food Research Journal
- Hazardous Substance Database
- International Uniform Chemical Information Database (IUCLID)
- Japan GHS Classification
- Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

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

Last Revision Date 22-Nov-2021

Restrictions on use Restricted to professional users.

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

Disclaimer

This information contained herein is, to the best of Everris' knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Everris shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Everris shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.

End of Safety Data Sheet