# **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 05-Dec-2023 Version: 1.01

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

1.1. Product identifier

Product Name Osmocote N 38-0-5
Product Code 4411-220HA
Unique Formula Identifier (UFI) 2Q6D-5002-Q00N-HC1J

Safety data sheet number 4411-220HA

REACH registration number

Pure substance/mixture

Not applicable
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	+47 22 59 13 00	
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]

Serious eye damaye/eye imtation	Category 2 - (H319)	Serious eye damage/eye irritation
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#### 2.2. Label elements



Signal word Warning

# **Hazard statements**

H319 - Causes serious eye irritation

EUH204 - Contains isocyanates. May produce an allergic reaction

## Precautionary Statements - EU (§28, 1272/2008)

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P337 + P313 - If eye irritation persists: Get medical advice/attention

## 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)
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub> (7778-80-5)	231-915-5	10 - 25%	Eye Irrit. 2 (H319)	-	01-2119489441- 34	-	-
Calcium sulfate anhydrous; CaSO <sub>4</sub> (7778-18-9)	231-900-3	0.1 - 1%	-	-	01-2119444918- 26	-	-

<sup>\*</sup>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 (ATEmix) 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
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	6600	2000	No data available
Calcium sulfate anhydrous; CaSO <sub>4</sub>	3000	No data available	3.26

# **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

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.

**Hazardous Combustion Products** Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

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.

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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 8B

# SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Exposure Limits \*\*\*

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>		•	•	TWA: 10.0 mg/m <sup>3</sup>	=
Calcium sulfate anhydrous;	-	TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10.0 mg/m <sup>3</sup>	-
CaSO <sub>4</sub>		STEL 10 mg/m <sup>3</sup>			
Chemical name	France	Germany TRGS	Germany DFG	Greece	Hungary

Calcium sulfate anhydrous; CaSO <sub>4</sub>	TWA: 10 mg/m <sup>3</sup>	TWA: 6 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3***</sup>	-	TWA: 41.5 mg/m <sup>3</sup>
Chemical name	Italy MDLPS	Latvia	Lithuania	Luxembourg	Netherlands
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	-	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	-
Calcium sulfate anhydrous; CaSO <sub>4</sub>	-	TWA: 4 mg/m <sup>3</sup>	-	-	-
Chemical name	Norway	Poland	Portugal	Romania	Slovakia
Calcium sulfate anhydrous; CaSO <sub>4</sub>	-	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 4 mg/m <sup>3</sup> TWA: 1.5 mg/m <sup>3</sup>
Chemical name	Slovenia	Spain	Sweden	Switzerland	United Kingdom
Calcium sulfate anhydrous; CaSO <sub>4</sub>	TWA: 6 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	-	TWA: 3 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	-

#### Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL)

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:** white, yellow, Brown

Odor: Fertilizer.

 Property
 Values
 Remarks • Method

 Melting Point/Freezing Point:
 No data available
 None known

 Poiling Point/Pange:
 No data available
 None known

Boiling Point/Range:No data availableNone knownFlammability (solid, gas):No data availableNone knownFlammability Limits in Air: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

pHNo data availableNone knownpH (as aqueous solution)No data availableNone knownKinematic Viscosity:No data availableNone knownDynamic Viscosity:No data availableNone knownWater solubilityNo data availableNone known

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Solubility(ies)No data availableNone knownPartition Coefficient:No data availableNone knownVapor Pressure:No data availableNone knownRelative densityNo data availableNone known

Bulk density 779 kg/m³
Pensity: No data available

Vapour density No data available None known

Particle characteristics

Particle SizeNo data availableParticle Size DistributionNo 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 derivates 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 processing. None under normal use conditions. 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** Causes serious eye damage.

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**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

Based on available data, the classification criteria are not met

**Acute toxicity** 

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

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	= 6600 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Calcium sulfate anhydrous; CaSO <sub>4</sub>	> 3000 mg/kg (Rat)	-	> 3.26 mg/L (Rat)4 h

#### 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** As a precaution the product should be treated as a sensitizer.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

CarcinogenicityBased on available data, the classification criteria are not met.Reproductive toxicityBased on available data, the classification criteria are not met.STOT - single exposureBased on available data, the classification criteria are not met.STOT - repeated exposureBased on available data, the classification criteria are not metAspiration hazardBased on available data, the classification criteria are not met

**Endocrine disrupting properties** 

# SECTION 12: Ecological information

#### 12.1. Toxicity

**Ecotoxicity** Based on available data, the classification criteria are not met.

#### Unknown aquatic toxicity

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

Γ	Chemical name	Algae/aquatic plants	Fish	Toxicity to	Crustacea
				microorganisms	
Γ	Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	EC50: =2900mg/L (72h,	LC50: =653mg/L (96h,	-	EC50: =890mg/L (48h,
1		Desmodesmus	Lepomis macrochirus)		Daphnia magna)
1		subspicatus)	LC50: =3550mg/L (96h,		-
			Lepomis macrochirus)		
1			LC50: 510 - 880mg/L		
L			(96h, Pimephales		

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		promelas)		
Calcium sulfate anhydrous;	-	LC50: =2980mg/L (96h,	-	=
CaSO <sub>4</sub>		Lepomis macrochirus)		
		LC50: >1970mg/L (96h,		
		Pimephales promelas)		

### 12.2. Persistence and degradability

Persistence and Degradability: No information available.

12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

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
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	The substance is not PBT / vPvB
Calcium sulfate anhydrous; CaSO <sub>4</sub>	The substance is not PBT / vPvB

#### 12.6. Endocrine disrupting properties

### 12.7. Other adverse effects

. No information available.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

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

14.1

UN-No: Not regulated

14.2

Proper shipping name: Not regulated

14.3

Transport hazard class(es) Not regulated

14.4

Packing group: Not regulated

Marine Pollutant: Not regulated

14.6

Special Provisions None

14.7

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

ADR

14.1 UN-No: Not regulated

14.2 Proper shipping name: Not regulated

14.3

Transport hazard class(es)

Not regulated

14.4

Packing group: Not regulated

<u>14.5</u>

Environmental hazards Not regulated

14.6

Special Provisions None

IATA

<u>14.1</u>

UN number or ID number Not regulated

<u>14.2</u>

Proper shipping name: Not regulated

14.3

Transport hazard class(es) Not regulated

<u>14.4</u>

Packing group Not regulated

<u>14.5</u>

Environmental hazards 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

#### **National regulations**

Denmark France

ICPE Not regulated

Germany

LGK (Germany) TRGS 510 8B

Gefahrstoffverordnung (Germany) TRGS 511 Not regulated

Water hazard class (WGK) non-hazardous to water (nwg)

Chemical name	German WGK Section
Potassium sulphate; K <sub>2</sub> SO <sub>4</sub>	Reg. no. 255, hazard class 1 - slightly hazardous to water
Calcium sulfate anhydrous; CaSO <sub>4</sub>	Reg. no. 325, hazard class 1 - slightly hazardous to water

#### **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

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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 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)

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

Not regulated

**Persistent Organic Pollutants** 

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

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

**International Inventories:** 

TSCA This product complies with USINV
PICCS: This product does not comply with phil:
Australian Inventory of Chemical This product does not comply with AICS

**Substances** 

Legend:

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

H319 - Causes serious eye irritation

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 Sk\* Skin designation

#### Classification procedure

- Calculation method
- Expert judgment and weight of evidence determination

#### Classification procedure

Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
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 05-Dec-2023

**Restrictions on use** Restricted to professional users.

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

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**End of Safety Data Sheet**