

SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

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

1.1 Product identifier

Trade name: FERTILIZER STICKS

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: fertilization of house plants.

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Supplier: Kozielski Sp. z o.o.

Address: ul. Lanciego 19/139, 02-792 Warszawa, Poland

Telephone/Fax number: +48 46 815 95 18

E-mail: kontakt@zielonydom.pl

E-mail address for a competent person responsible for SDS: biuro@thetaconsulting.pl

1.4 Emergency telephone number

112 (general emergency telephone number)

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Eye Dam. 1 H318

Causes serious eye damage.

2.2 Label elements

Hazard pictograms and signal words



DANGER

Names of substances that should be mentioned on the label

Contains: superphosphates; calcium bis(dihydrogenorthophosphate).

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

P102 Keep out of reach of children.

P232 Protect from moisture.

P280 Wear protective gloves/protective clothing/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/doctor.

P501 Dispose of contents/container to properly labelled waste containers according to national law.

Additional information

The product requires labelling in accordance with the Regulation (EU) No 2019/1009 of 5 June 2019.

2.3 Other hazards

Product does not contain components, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

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Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

CAS number: 8011-76-5 EC number: 232-379-5 Index number: - REACH number: 01-2119488967-11-XXXX	<u>superphosphates</u> Eye Dam. 1 H318	≤ 17,0 %
CAS number: 7758-23-8 EC number: 231-837-1 Index number: - REACH number: -	<u>calcium bis(dihydrogenorthophosphate)</u> Eye Dam. 1 H318	≤ 8,0 %
CAS number: 14807-96-6 EC number: 238-877-9 Index number: - REACH number: -	<u>talc</u> The substance is not classified as hazardous.	≤ 4,0 %
CAS number: 67-56-1 EC number: 200-659-6 Index number: 603-001-00-X REACH number: -	<u>methanol</u> ¹⁾ Flam. Liq. 2 H225, Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT SE 1 H370 <u>Specific concentration limits:</u> STOT SE 1 H370: C ≥ 10 % STOT SE 2 H371: 3 % ≤ C < 10 %	< 0,5 %

¹⁾ Substance with occupational exposure limits established on the European Union level.

Full text of each relevant H phrase is given in section 16.

Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: rinse thoroughly skin with water and soap for 10 - 15 minutes. Take off contaminated clothing. Wash it before reuse. Consult a doctor if disturbing symptoms occur.

Eye contact: protect non-irritated eye, remove contact lenses. Rinse contaminated eyes thoroughly with water for 15 minutes. Avoid powerful water stream – risk of cornea damage. Apply a sterile dressing. Immediately consult a ophthalmologist.

Ingestion: do not induce vomiting. Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor if disturbing symptoms occur.

Inhalation: due to the form of the product, exposure by this route is unlikely. However in case of inhalation remove the victim to fresh air, keep warm and at rest. Consult a doctor if disturbing symptoms appear.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: may cause redness, burning sensation, skin dryness.

Eye contact: redness, tearing, burning sensation, pain, risk of serious damage to eyes.

Ingestion: may cause abdominal pains, nausea, vomiting, diarrhea.

Inhalation: negative effects of exposure are not to be expected.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: adapt the extinguishing media to surrounding materials.

Unsuitable extinguishing media: water jet – risk of the propagation of the flame.

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5.2 Special hazards arising from the substance or mixture

During the fire may produce harmful gases containing carbon oxides, nitrogen oxides, phosphorus oxides, other hazardous unidentified products of thermal decomposition. Do not inhale combustion products, they can be dangerous for human health.

5.3 Advice for firefighters

Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Cool down the containers that are endangered by fire with a water spray from a safe distance. Collect used extinguishing media.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Ensure that only the trained personnel removes the effects of the accident. Use personal protective equipment. In case of large spills, isolate the exposed area. Avoid eyes and skin contamination. Ensure adequate ventilation.

6.2 Environmental precautions

Do not allow the product to get into the sewage system, surface waters and soil. In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Collect the released product mechanically. Transfer the collected material for recycling or treat it as waste. Clean the contaminated area.

6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Personal protection equipment – section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Do not eat, drink and smoke in the workplace. Wash hands carefully before breaks and after work. Use personal protective equipment. Avoid eyes and skin contamination. Keep unused containers tightly sealed. Ensure adequate ventilation. Use as intended.

7.2 Conditions for safe storage, including any incompatibilities

Store only in original, tightly sealed containers in dry, cool and well ventilated place. Keep away from, foodstuffs and animal feed. Keep away from incompatible materials (see subsection 10.5). Avoid sources of heat and direct sunlight. Protect against water and moisture. Protect from frost.

7.3 Specific end use(s)

No information about other uses than those mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limit Values

Specification	TWA 8 hour	STEL 15 min
methanol [CAS 67-56-1]*	260 mg/m ³	-

* skin - means that skin absorption of a substance may be just as important as inhalation exposure.

The table above shows the maximum workplace concentration values on the European Union level.

Please check any national occupational exposure limit values in your country.

Legal Basis: Commission Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU.

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Specification	TWA 8 hour	STEL 15 min
methanol [CAS 67-56-1]*	266 mg/m ³	333 mg/m ³

* skin - means that skin absorption of a substance may be just as important as inhalation exposure.

Additionally, the product contains talc [CAS 14807-96-6], for which the maximum workplace concentration, but due to the form of the product there is no obligation to monitor the maximum allowable workplace concentrations.

The table above shows the maximum workplace concentration values in Great Britain.

Legal Basis: EH40/2005 Workplace exposure limits. Fourth Edition 2020.

Recommended control procedures

Procedures for monitoring concentrations of hazardous components in the air and procedures for monitoring air purity in the workplace should be applied - if available and justified at a given position - in accordance with the relevant national or European Standards, taking into account the conditions at the site of exposure and the appropriate measurement methods adapted to the working conditions. The mode, type and frequency of tests and measurements should meet the requirements of the appropriate laws.

DNEL values for components

superphosphates [CAS 8011-76-5]

Exposure route	Exposure scenario	DNEL (workers)
inhalation	long-term exposure, systemic	3,1 mg/m ³
skin	long-term exposure, systemic	17,4 mg/kg bw/day
Exposure route	Exposure scenario	DNEL (general population)
inhalation	long-term exposure, systemic	0,9 mg/m ³
oral	long-term exposure, systemic	2,1 mg/kg bw/day
skin	long-term exposure, systemic	10,4 mg/kg bw/day

calcium bis(dihydrogenorthophosphate) [CAS 7758-23-8]

Exposure route	Exposure scenario	DNEL (workers)
inhalation	long-term exposure, systemic	4,07 mg/m ³
Exposure route	Exposure scenario	DNEL (general population)
inhalation	long-term exposure, systemic	3,04 mg/m ³

8.2 Exposure controls

Appropriate engineering controls

Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink and smoke during the work. Before break and after work wash hands carefully. Provide general and / or local ventilation in the workplace in order to maintain the concentration of the harmful agent in the air below the established limit values. Eye safety washers should be installed near the working place.

Individual protection measures, such as personal protective equipment

The necessity to use and the selection of appropriate personal protective equipment should take into account the type of risk posed by the product, working conditions and the way of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to provide protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleaning. Any contaminated or damaged PPE must be replaced immediately.

Hand protection

Use protective gloves resistant to chemicals according to EN 374. In case of a long-term, frequent contact with the product, in the event of a failure, protective gloves with the effectiveness level 2 or higher are recommended. Select the material for the gloves individually at the workplace.

The glove material has to be impermeable and resistant to the product. The choice of material for protective gloves should be made taking into account the breakthrough times, permeation rate and degradation. Moreover, the selection of the appropriate gloves does not only depend on the material, but also on other quality characteristics and varies from manufacturer to manufacturer. The exact breakthrough time has to be obtained from the glove manufacturer and it must be observed.

Eye protection

Use safety glasses in accordance with EN 166.

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Respiratory protection

Not required with adequate ventilation.

Thermal hazards

Not applicable.

Environmental exposure controls

Avoid release to the environment, do not enter the sewage system. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	solid
Colour:	acc. to the assortment
Odour:	characteristic
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not flammable product
Lower and upper explosion limit:	not applicable
Flash point:	not applicable,
Auto-ignition temperature:	not applicable, not flammable product
Decomposition temperature:	not determined
pH:	not applicable
Kinematic viscosity:	not applicable
Solubility:	soluble in water
Partition coefficient n-octanol/water (log value):	not determined
Vapour pressure:	not applicable
Density and/or relative density:	not determined
Relative vapour density:	not applicable
Particle characteristics:	not determined

9.2 Other information

No additional tests.

Section 10: Stability and reactivity

10.1 Reactivity

The product is not very reactive. It does not go under hazardous polymerization. See also subsection 10.3-10.5.

10.2 Chemical stability

The product is stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions

The hazardous reactions are not known.

10.4 Conditions to avoid

Avoid sources of heat and direct sunlight. Protect against water and moisture.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

Not known.

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Section 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Components toxicity

superphosphates [CAS 8011-76-5]

LD₅₀ (oral) > 2000 mg/kg (OECD 425, test material: diammonium hydrogen phosphate)

LD₅₀ (skin) > 5000 mg/kg (OECD 402, test material: diammonium hydrogen phosphate)

LC₅₀ (inhalation) > 5 mg/l (OECD 403, test material: diammonium hydrogen phosphate)

calcium bis(dihydrogenorthophosphate) [CAS 7758-23-8]

LD₅₀ (oral, rat) 3986 mg/kg

LD₅₀ (skin, rabbit) > 2 000 mg/kg

LC₅₀ (inhalation, rat) > 2,6 mg/l/4 h (OECD 403)

Mixture toxicity

Acute toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

Causes serious eye damage.

Respiratory or skin sensitisation

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.

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.

Information on likely routes of exposure

Exposure route: eye exposure, skin exposure, ingestion. For more information on the impact of each possible route of exposure, see subsection 4.2.

Symptoms related to the physical, chemical and toxicological characteristics

See subsection 4.2.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

See subsection 4.2.

11.2. Information on other hazards

Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

Other information

Not known.

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Section 12: Ecological information

12.1 Toxicity

Components toxicity

superphosphates [CAS 8011-76-5]

Toxicity to fish: LC₅₀ > 85,9 mg/l/96 h (OECD 203, test material: ammonium dihydrogen phosphate)

Toxicity for invertebrates: EC₅₀ 1790 mg/l/72 h

Toxicity to algae: EC₅₀ > 87,6 mg/l/72 h (OECD 201, test material: ammonium dihydrogen phosphate)

calcium bis(dihydrogenorthophosphate) [CAS 7758-23-8]

Toxicity to fish: LC₅₀ > 100 mg/l/96 h/ *Oncorhynchus mykiss*

Toxicity for invertebrates: EC₅₀ > 100 mg/l/48 h/ *Daphnia magna*

Toxicity to algae: ErC₅₀ > 100 mg/l/72 h/ *Desmodesmus subspicatus*

The product is not classified as hazardous to the aquatic environment.

12.2 Persistence and degradability

Inorganic salts contained in the product undergo hydrolysis in water.

12.3 Bioaccumulative potential

Do not expected to bioaccumulate.

12.4 Mobility in soil

The product is mobile in the soil and in the aquatic environment. Mobility of components of the mixture in soil depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms.

12.5 Results of PBT and vPvB assessment

Product does not contain components, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

12.6 Endocrine disrupting properties

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

12.7 Other adverse effects

The mixture is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg, global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the mixture: do not deposit together with household waste. Do not enter into sewage system. Residues remove to properly labeled containers and disposal in accordance with the local legislation. Waste code should be given in the place of waste formation.

Disposal methods for used packing: reuse / recycle / eliminate empty containers in accordance with the local legislation. Only completely empty containers can be reused.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

Section 14: Transport information

14.1 UN number or ID number

Not applicable. The product is not dangerous during transport.

14.2 UN proper shipping name

Not applicable.

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14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.

European Parliament and of Council Directive 2008/98/EC of 19 November 2008 on waste and repealing certain Directives as amended.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR).

IMDG Code International Maritime Dangerous Goods Code.

IATA Dangerous Goods Regulations.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Commission Directive 2019/1831/EU of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Regulation (EU) No 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

Commission Regulation (EU) No 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

The components of the mixture are not included in Annex XIV of the REACH Regulation.

Annex XVII of REACH: methanol [CAS 67-56-1]

15.2 Chemical safety assessment

A Chemical Safety Assessment is not required for mixtures.

Section 16: Other information

Full text of indicated H phrases mentioned in section 3

H225 Highly flammable liquid and vapour.

H301 Toxic if swallowed.

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H311	Toxic in contact with skin.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H370	Causes damage to organs.
H371	May cause damage to organs.

Clarification of aberrations and acronyms

PBT	Persistent, Bioaccumulative and Toxic substance
vPvB	Very Persistent, very Bioaccumulative substance
TWA	Time Weighted Average
STEL	Short-Term Exposure Limits
Flam. Liq. 2	Flammable liquid category 2
Acute Tox. 3	Acute Toxicity category 3
Eye Dam. 1	Serious eye damage category 1
STOT SE 1, 2	Specific target organ toxicity — single exposure category 1, 2

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Key literature references and sources of data

This SDS was prepared on the basis of safety data sheets of the individual components, literature data, online databases (e.g. ECHA, TOXNET, COSING), our knowledge and experience, taking into account the current legislation.

Procedures used for the mixture classification according with Regulation 1272/2008/EC as amended

Eye Dam. 1 H318	calculation method
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Additional information

Date of issue: 10.01.2023

Version: 1.0/EN

Safety Data Sheet made by: **THETA Consulting Sp. z o. o.** (based on manufacturer's data)

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.