



MEDICAP[®] ZN Systemic Fertilizer Implants

Safety Data Sheet

SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE AND COMPANY

Product Identifier MEDICAP[®] ZN Systemic Tree Implants

Other Means of Identification None

Recommended Use of Product Fertilizer

Manufacturer Creative Sales, Inc.

Address 222 N. Park Ave
Fremont, NE 68025 USA

Telephone 402-727-4800
402-727-4841 (FAX)

Website www.acecap-medicap.com

E-mail brad@acecap.net

Emergency phone number 800-759-7739

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity, Category 4, Oral, H302
Serious eye damage, Category 1, H318

For the full text of the H-Statements mentioned in this Section, see Section 16

GHS-Labeling

Hazard pictograms



Signal Word
Danger

Hazard Statements

H302 Harmful if swallowed
H318 Causes serious eye damage

Precautionary Statements

P264 Wash skin thoroughly after handling
P270 Do not eat, drink or smoke when using this product
P280 Wear protective gloves, eye protection and face protection
P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
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 or doctor/physician
P330 Rinse mouth
P501 Dispose of contents/container to an approved waste disposal plant

Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Formula	$\text{ZnSO}_4 \cdot \text{H}_2\text{O}$	$\text{O}_4\text{SZn} \cdot \text{H}_2\text{O}$ $\text{O}_4\text{SZn} \cdot \text{H}_2\text{O}$ (Hill)
Molar mass	179.45 g/mol	

Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

Zinc sulphate monohydrate ($\geq 90\%$ - $\leq 100\%$)

7446-19-7

Exact percentages are being withheld as a trade secret

SECTION 4: FIRST AID MEASURES

Description of first-aid measures

Inhalation

After inhalation: fresh air

Skin contact

After skin contact: wash off with plenty of water. Remove contaminated clothing

Eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist

Ingestion

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician

Never give anything by mouth to an unconscious person

Most important symptoms and effects, both acute and delayed

irritant effects, pain, Diarrhea, Vomiting, cardiovascular disorders, collapse

Indication of any immediate medical attention and special treatment needed

No information available

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given

Special hazards arising from the substance or mixture

Not combustible

Ambient fire may liberate hazardous vapors

Fire may cause evolution of:

Sulfur oxides

Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert

Advice for emergency responders: Protective equipment see section 8

Environmental precautions

Do not empty into drains

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills

Observe possible material restrictions (see sections 7 and 10)

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Observe label precautions

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry

Store at +5 °C to +30 °C (+41 °F to +86 °F)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit(s)

Contains no substances with occupational exposure limit values

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier

Hygiene measures

Change contaminated clothing. Wash hands after working with substance

Eye/face protection

Tightly fitting safety goggles

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary

Other protective equipment:

Protective clothing

Respiratory protection

Required when dusts are generated

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	solid
Color	off-white/light blue
Odor	odorless
Odor Threshold	No information available
Ph	4.0 – 5.65 at 50 g/l 68 °F (20 °C)
Melting point	Not applicable
Boiling point/boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Lower explosion limit	Not applicable
Upper explosion limit	Not applicable
Vapor pressure	No information available
Relative vapor density	No information available
Density	3.2 g/cm ³ at 68 °F (20 °C)
Relative density	No information available
Water solubility	ca.350 g/l at 68 °F (20 °C)
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	ca.1112 °F (600 °C) (anhydrous substance)
Viscosity, dynamic	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Ignition temperature	Not applicable
Bulk density	ca.500 kg/m ³

SECTION 10. STABILITY AND REACTIVITY

Reactivity

See below

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature)

Possibility of hazardous reactions

No information available

Conditions to avoid

Strong heating

Incompatible materials

No information available

Hazardous decomposition products

In the event of fire: See section 5

SECTION 11. TOXICOLOGICAL INFORMATION**Information on toxicological effects***Likely route of exposure*

Eye contact, Skin contact, Ingestion

Acute oral toxicity

Absorption

Acute toxicity estimate: 500.1 mg/kg

Expert judgment

Acute inhalation toxicity

Symptoms: damage of respiratory tract, Inhalation may lead to the formation of oedemas in the respiratory tract

Skin irritation

Slight irritation

Eye irritation

Causes serious eye damage

Genotoxicity in vitro

Ames test result: negative

(anhydrous substance) (IUCILID)

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled

Carcinogenicity

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH

Further information

After absorption:

Systemic effects: pain, Vomiting, Diarrhea

After uptake of large quantities:

Drop in blood pressure, cardiovascular disorders, collapse

Further data:
Handle in accordance with good industrial hygiene and safety practice

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 0.15 mg/l; 48 h (Lit)

Toxicity to algae

IC50 Scenedesmus quadricauda (Green algae): 0.52 mg/l; 5 d (anhydrous substance) (IUCLID)

Persistence and degradability

Biodegradability

The methods for determining the biological degradability are not applicable to inorganic substances

Bioaccumulative potential

No information available

Mobility in soil

No information available

Additional ecological information

Biological effects: Bactericidal effect

Hazard for drinking water supplies

Further information on ecology

Discharge into the environment must be avoided

SECTION 13. DISPOSAL CONSIDERATIONS

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

Land transport (DOT)

UN number UN 3077

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (ZINC SULPHATE)

Class 9

Packing group III

Environmentally hazardous --

Air transport (IATA)

UN number UN 3077

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (ZINC-SULPHATE)

Class 9

Packing group III

Product name: MEDICAP® ZN SYSTEMIC TREE IMPLANTS

SDS US

Issue date: 09-27-2017

Environmentally hazardous	--
Special precautions for user	no
Sea transport (IMDG)	
UN number	UN 3077
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (ZINC-SULPHATE)
Class	9
Packing group	III
Environmentally hazardous	--
Special precautions for user	yes
EmS	F-A S-F
Segregation Group	0007 Heavy Metals and their salts (including their organometallic compounds)

SECTION 15. REGULATORY INFORMATION

United States of America

SARA 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

Ingredients

Zinc sulphate monohydrate	7446-19-7	100 %
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SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

Clean Water Act

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 116.4A

Ingredients

Zinc Sulphate

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3

Ingredients

Zinc Sulphate

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Ingredients

Zinc Sulphate monohydrate

Pennsylvania Right to Know

Ingredients

Zinc Sulphate monohydrate

New Jersey Right To Know

Ingredients

Zinc Sulphate monohydrate

Product name: MEDICAP® ZN SYSTEMIC TREE IMPLANTS

SDS US

Issue date: 09-27-2017

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects

Notification status

TSCA:	All components of the product are listed in the TSCA-inventory
DSL:	All components of this product are on the Canadian DSL
KOREA:	Not in compliance with the inventory

SECTION 16. OTHER INFORMATION

Training advice

Provide adequate information, instruction and training for operators

Labeling

Hazard pictograms



Signal Word

Danger

Hazard Statements

H302 Harmful if swallowed

H318 Causes serious eye damage

H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements

Prevention

P273 Avoid release to the environment

P280 Wear eye protection

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/attention

Full text of H-Statements referred to under sections 2 and 3

H302	Harmful if swallowed
H318	Causes serious eye damage

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

Used abbreviations and acronyms can be looked up at www.wikipedia.org