*M*EDIC*AP*® FE Systemic Fertilizer Implants

CREATIVE SALES, INC. **Safety Data Sheet**

SECTION 1: IDENTIFICATION OF SUBSTANCE/MIXTURE AND COMPANY

Product Identifier *M*EDIC*AP*® FE 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-Labeling

Not a dangerous substance according to GHS

Other hazards

None known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Formula $C_6H_8O_7$*xFe*xH_3N (Hill)

Hazardous ingredients

Chemical Name (Concentration)
CAS-No.
Ammonium iron(III) citrate (>= 90 % - <= 100 %)
1185-57-5

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

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

Never give anything by mouth to an unconscious person

Most important symptoms and effects, both acute and delayed

The following applies to ammonium salts in general; after swallowing ; local irritation symptoms, nausea, vomiting, diarrhea. Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, hemolysis.

The following applies to soluble iron compounds: nausea and vomiting after swallowing. The absorption of large quantities is followed by cardiovascular disorders. Toxic effect on liver and kidneys.

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:
Nitrogren 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. 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

Storage temperature: no restrictions

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit(s)

Ingredients

Basis	Value	Threshold limits	Remarks
Ammonium iron(III) citrate 1185-57-5			
ACGIH	Time Weighted Average (TWA):	1 mg/m³	Expressed as: as Fe
NIOSH/GUIDE	Recommended Exposure Limit (REL):	1 mg/m³	Expressed as: as Fe
Z1A	Time Weighted Average	1 mg/m³	Expressed as: as Fe

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

Safety glasses

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

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	dark brown
Odor	odorless
Odor Threshold	Not applicable
Ph	ca. 6 – 8 at 100 g/l 68°F (20 °C)
Melting point	No information available
Boiling point	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Lower explosion limit	No information available
Upper explosion limit	No information available

Vapor pressure	No information available
Relative vapor density	No information available
Density	No information available
Relative density	No information available
Water solubility	ca. 1,200 g/l at 68 °F (20 °C)
Partition coefficient: n octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity, dynamic	No information available
Explosive properties	Not classified as explosive
Oxidizing properties	none

SECTION 10. STABILITY AND REACTIVITY

Reactivity

See below

Chemical stability

Sensitivity to light

Possibility of hazardous reactions

Dangerous reactions are not expected handling the product according to its intented use

Conditions to avoid

no information available

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
LD50 Rat: > 2,000 mg/kg (RTECS)

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

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

The following applies to soluble iron compounds: nausea and vomiting after swallowing. The absorption of large quantities is followed by cardiovascular disorders. Toxic effect on liver and kidneys.

The following applies to ammonium salts in general: after swallowing: local irritation symptoms, nausea, vomiting, diarrhea. Systemic effect: after the uptake of very large quantities: drop in blood pressure, collapse, CNS disorders, spasms, narcotic conditions, respiratory paralysis, hemolysis.
Handle in accordance with good industrial hygiene and safety practice.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

No information available

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

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)

Not classified as dangerous in the meaning of transport regulations

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations

SECTION 15. REGULATORY INFORMATION

United States of America

SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

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 Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:
Ingredients
Ammonium iron(III) citrate

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:
Ingredients
Ammonium iron(III) citrate

DEA List I
Not listed

DEA List II
Not listed

US State Regulations

Massachusetts Right To Know
Ingredients
Ammonium iron(III) citrate

Pennsylvania Right To Know
Ingredients
Ammonium iron(III) citrate

New Jersey Right To Know
Ingredients
Ammonium iron(III) citrate

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

SECTION 16. OTHER INFORMATION

Training advice
Provide adequate information, instruction and training for operators

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

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