

## AMMONIUM IRON(III) CITRATE

### SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: Ammonium iron(III) citrate  
Product Code: CM 23,471  
CAS#: 1185-57-5  
Synonym: Ferric ammonium citrate  
Chemical Name: Not available  
Chemical Formula:  $C_{12}H_{22}FeN_3O_4$   
Formula weight : 488.16

### SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

Composition:  
Name: Ammonium iron(III) citrate  
Toxicological Data on Ingredients: Not available.

### SECTION 3: HAZARDS IDENTIFICATION

Classification of the substance or mixture  
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.  
Potential Acute Health Effects: Not available  
Potential Chronic Health Effects: Not available  
Carcinogenic Effects: Not available.  
Mutagenic Effects: Not available.  
Teratogenic Effects: Not available.  
Developmental Toxicity: Not Available

### SECTION 4: FIRST AID MEASURES

Description of first aid measures  
General advice Consult a physician. Show this safety data sheet to the doctor in attendance.  
If inhaled If breathed in: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.  
In case of skin contact Wash off with soap and plenty of water. Consult a physician.  
In case of eye contact: Flush eyes with water as a precaution.  
If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.  
Most important symptoms and effects, both acute and delay: No data available  
Indication of any immediate medical attention and special treatment needed: No data available

### SECTION 5: FIRE AND EXPLOSION DATA

Extinguishing media  
Suitable extinguishing media :  
Water Foam Carbon dioxide (CO<sub>2</sub>) Dry powder  
Special hazards arising from the substance or mixture  
Carbon oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Sodium oxides  
Combustible.



Development of hazardous combustion gases or vapours possible in the event of fire.  
Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.  
Environmental precautions Do not let product enter drains.  
Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers.

#### SECTION 7: HANDLING AND STORAGE

Precautions for safe handling  
Work under hood. Do not inhale substance/mixture.  
Conditions for safe storage, including any incompatibilities  
Tightly closed. Dry.  
Light sensitive. Hygroscopic.  
Storage Class:  
Storage class (TRGS 510): 11: Combustible Solids.  
Specific end use(s) A part from the uses:  
No other specific uses are stipulated

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure controls  
Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.  
Personal protective equipment  
Eye/face protection Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).  
Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.  
Body Protection Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.  
Respiratory protection For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).  
Control of environmental exposure Do not let product enter drains.

#### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance Form	:Powder
Colour	:Brown
Odour	:Not available
Odour Threshold	:Not available
pH	:Not available
Melting point/freezingpoint	:Not available
Initial boiling point and boiling range	:Not available
Flash point	:Not available
Evaporation rate	:Not available



Flammability (solid, gas)	:Not available
Upper/lower flammability or explosive limits	:Not available
Vapour pressure	:Not available
Vapour density	:Not available
Relative density	:Not available
Water solubility	:Not available
Partition coefficient	:Not available
Auto-ignition temperature	:Not available

#### SECTION 10: STABILITY AND REACTIVITY DATA

Reactivity no data available

Chemical stability

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

Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Conditions to avoid :

no data available

Incompatible materials

Aluminum, Copper, Copper alloys, Nickel, Zinc

Hazardous decomposition products Other decomposition products - In the event of fire

#### SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity:

LD50 Oral - Rat - male and female - > 2.000 mg/kg

LD50 Dermal - Rabbit - male and female - > 8.000 mg/kg

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitization no data available

Carcinogenicity no data available

#### SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

Toxicity to fish static test LC50 - Fish - > 100 mg/l - 96 h

Remarks: The value is given in analogy to the following substances:

Diammonium hydrogen citrate

Toxicity to daphnia static test EC50 - Daphnia magna (Water flea) - > 100 mg/l - 48 h

and other aquatic  
invertebrates

Toxicity to algae Remarks: The value is given in analogy to the following substances:

Diammonium hydrogen citrate

Persistence and degradability:

Biodegradability Biochemical oxygen demand - Exposure time 14 d

Result: 77 % - Readily biodegradable.

The value is given in analogy to the following substances: citric acid

Bioaccumulative potential :

Bioaccumulation Lepomis macrochirus (Bluegill sunfish) - 28 d

at 21 °C - 0,08 mg/l (Edetate disodium dihydrate)



Bioconcentration factor (BCF): 1,8  
 Remarks: The value is given in analogy to the following substances:  
 Ethylenedinitrilotetraacetic acid, Tetrasodiumsalt  
 Mobility in soil no data available  
 Results of PBT and vPvB assessment PBT/vPvB assessment not available  
 Other adverse affects no data available

### SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods Product Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging Dispose of as unused product.

### SECTION 14: TRANSPORT INFORMATION

UN number:		
ADR/RID:	IMDG:	IATA:
UN proper shipping name		
ADR/RID: Not dangerous goods		
IMDG: Not dangerous goods		
IATA: Not dangerous goods		
Transport hazard class(es):		
ADR/RID:	IMDG:	IATA:
Packaging group:		
ADR/RID:	IMDG:	IATA:
Environmental hazards:		
ADR/RID: No	IMDG Marinepollutant: No	IATA: No

### SECTION 15: OTHER REGULATORY INFORMATION

Regulatory information This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### SECTION 16: OTHER INFORMATION

References: Full text of H AND R-Statements.  
 H332 Harmful if inhaled.  
 H373 May cause damage to organs through prolonged or repeated exposure if inhaled.  
 Other Special Considerations: Not available

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