Material Safety Data Sheet
Ammonium Iron(III)-Citrate

ACC# 00615

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Ammonium Iron(III)-Citrate  
**Catalog Numbers:** AC211840000, AC211840010  
**Synonyms:** Ferric Ammonium Citrate; Citric Acid Ammonium Iron (3+) Salt.  
**Company Identification:**  
Acros Organics N.V.  
One Reagent Lane  
Fair Lawn, NJ 07410  
For information in North America, call: 800-ACROS-01  
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1185-57-5</td>
<td>FERRIC AMMONIUM CITRATE</td>
<td>100</td>
<td>214-686-6</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** None listed.  
**Risk Phrases:** None listed.

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: yellow to green solid. **Caution!** May cause skin irritation. May cause eye irritation. May cause respiratory tract irritation. May cause digestive tract irritation.  
**Target Organs:** None.

**Potential Health Effects**  
**Eye:** May cause irritation, pain, blurred vision, and possible burns.  
**Skin:** May cause skin irritation.  
**Ingestion:** May cause irritation of the digestive tract. Inorganic iron compounds may cause gastrointestinal irritation and damage, vomiting, pulmonary edema, convulsions, rapid heart beat and low blood pressure. Ingestion of iron compounds may cause hemorrhage and necrosis of the stomach with shock, severe diarrhea, and possible coma.  
**Inhalation:** May cause respiratory tract irritation.  
**Chronic:** No information found.

Section 4 - First Aid Measures
**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically.

**Antidote:** The use of Deferoxamine as a chelating agent should be determined only by qualified medical personnel.

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**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 0; Instability: 0

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**Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation.

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**Section 7 - Handling and Storage**

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Do not store in direct sunlight. Keep containers tightly closed.

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**Section 8 - Exposure Controls, Personal Protection**

**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**
<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FERRIC AMMONIUM CITRATE</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** FERRIC AMMONIUM CITRATE: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

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**Section 9 - Physical and Chemical Properties**

**Physical State:** Solid
**Appearance:** yellow to green
**Odor:** None reported
**pH:** Not available.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Decomposes.

**Freezing/Melting Point:** Decomposes.

**Decomposition Temperature:** Not available.

**Solubility:** Soluble.

**Specific Gravity/Density:** 1.8 @ 20C

**Molecular Formula:** Mixture

**Molecular Weight:** Not available.

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**Section 10 - Stability and Reactivity**

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, light, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizing agents - light.

**Hazardous Decomposition Products:** Ammonia.

**Hazardous Polymerization:** Has not been reported.

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**Section 11 - Toxicological Information**

**RTECS#:**

**CAS# 1185-57-5: GE7540000**

**LD50/LC50:**

Not available.
**Carcinogenicity:**
CAS# 1185-57-5: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.

**Mutagenicity:** No information available.

**Other Studies:** None.

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**Section 12 - Ecological Information**

**Ecotoxicity:** No data available. No information available.

**Environmental:** No information reported.

**Physical:** No information available.

**Other:** None.

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**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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**Section 14 - Transport Information**

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<tr>
<th>Shipping Name:</th>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
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</thead>
<tbody>
<tr>
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<table>
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<tr>
<th>Hazard Class:</th>
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<table>
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<tr>
<th>UN Number:</th>
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<table>
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<tr>
<th>Packing Group:</th>
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**Section 15 - Regulatory Information**

**US FEDERAL**

**TSCA**
CAS# 1185-57-5 is listed on the TSCA inventory.

**Health & Safety Reporting List**
None of the chemicals are on the Health & Safety Reporting List.

**Chemical Test Rules**
None of the chemicals in this product are under a Chemical Test Rule.

**Section 12b**
None of the chemicals are listed under TSCA Section 12b.

**TSCA Significant New Use Rule**
None of the chemicals in this material have a SNUR under TSCA.

**SARA**

**CERCLA Hazardous Substances and corresponding RQs**
CAS# 1185-57-5: 1000 lb final RQ; 454 kg final RQ

**SARA Section 302 Extremely Hazardous Substances**
None of the chemicals in this product have a TPQ.

**SARA Codes**
CAS # 1185-57-5: chronic.

**Section 313**
No chemicals are reportable under Section 313.

**Clean Air Act:**
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depletors. This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**
CAS# 1185-57-5 is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**
None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**
CAS# 1185-57-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.
California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**
Not available.

**Risk Phrases:**

**Safety Phrases:**
S 24/25 Avoid contact with skin and eyes.

**WGK (Water Danger/Protection)**
CAS# 1185-57-5: No information available.

**Canada - DSL/NDSL**
CAS# 1185-57-5 is listed on Canada's DSL List.

**Canada - WHMIS**
WHMIS: Not available.

**Canadian Ingredient Disclosure List**
CAS# 1185-57-5 is not listed on the Canadian Ingredient Disclosure List.

**Exposure Limits**
CAS# 1185-57-5: OEL-DENMARK:TWA 1 mg(Fe)/m3 January 1993 OEL-FINLA ND:TWA 1 mg(Fe)/m3 January 1993 OEL-THE NETHERLANDS:TWA 1 mg(Fe)/m3 January 1993 OEL-SWITZERLAND:TWA 1 mg(Fe)/m3 January 1993 OEL-UNIT ED KINGDOM:TWA 1 mg(Fe)/m3; STEL 2 mg(Fe)/m3 January 1993
Section 16 - Additional Information

**MSDS Creation Date:** 6/23/1998  
**Revision #2 Date:** 3/18/2003

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