

**Ammonium Citrate Solution (251) Lead USP**

Date 7.2.2013

Previous date: -

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier****1.1.1 Commercial Product Name**

Ammonium Citrate Solution (251) Lead USP

**1.1.2 Product code**

FF6124 100 ML

**1.2 Relevant identified uses of the substance or mixture and uses advised against****1.2.1 Recommended use**

Laboratory chemical.

**1.3 Details of the supplier of the safety data sheet****1.3.1 Supplier**

Oy FF-Chemicals Ab

**P.O.Box**

Teollisuustie 4

**Postcode and post office**

FI-90830 HAUKIPUDAS

Finland

**Telephone**

+358 (0)8 5563 193

**Telefax**

+358 (0)8 5563 194

**Email**

ffc@ff-chemicals.fi

**1.4 Emergency telephone number****1.4.1 Telephone number, name and address**

Please contact the Emergency Centre in your own country.

**2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

Classification according to 1999/45/EC: Irritating to eyes.

**1272/2008 (CLP)**

Eye Irrit. 2, H319

Skin Irrit. 2, H315

**67/548/EEC - 1999/45/EC**

Xi; R36

**2.2 Label elements****1272/2008 (CLP)**

GHS07

Signal word

**Warning****Hazard Statements**

H319

Causes serious eye irritation.

H315

Causes skin irritation.

**Precautionary Statements**

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

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.

**2.3 Other hazards****3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Hazardous components**

**Ammonium Citrate Solution (251) Lead USP**

Date 7.2.2013

Previous date: -

CAS/EC and Reg. number	Chemical name of the substance	Concentration Classification	
5949-29-1	Citric acid monohydrate	ca 40 %	Xi; R36; Eye Irrit. 2, H319
1336-21-6	Ammonia	ca 4 %	C; R34;N; R50; Skin Corr. 1B, H314; Aquatic Acute 1, H400

**3.3 Other information**

The texts of R and H phrases can be read in chapter 16.

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

Move the exposed person out from the contaminated area. Take off contaminated clothing immediately. Wear personal protective equipment.

**4.1.2 Inhalation**

Move the exposed to fresh air. Seek medical advice if symptoms persist.

**4.1.3 Skin contact**

Flush with copious amounts of water. Take off contaminated clothing. Seek medical advice if irritation persists.

**4.1.4 Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Contact an ophthalmologist.

**4.1.5 Ingestion**

Rinse mouth. Seek medical advice. Do NOT induce vomiting.

**4.2 Most important symptoms and effects, both acute and delayed**

Causes skin irritation. Causes serious eye irritation.

**4.3 Indication of immediate medical attention and special treatment needed**

If feeling unwell, seek medical advice.

**5. FIREFIGHTING MEASURES**

Non-combustible.

**5.1 Extinguishing media****5.1.1 Suitable extinguishing media**

Extinguishing media should be suitable to surrounding materials.

**5.2 Special hazards arising from the substance or mixture**

May liberate hazardous fumes or vapour in case of fire.

**5.3 Advice for firefighters**

Sammuttajan on käytettävä paineilmahengityslaitetta.

**6. ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Evacuate the area. Wear personal protective equipment. Take care of sufficient ventilation. Avoid breathing vapours and mist.

**6.2 Environmental precautions**

Prevent leakage into sewers, soil, and waters.

**6.3 Methods and materials for containment and cleaning up**

Absorb in appropriate material. Pick up in containers for waste treatment. Clean contaminated surfaces. Ventilate the area.

**6.4 Reference to other sections**

8, 13.

**Ammonium Citrate Solution (251) Lead USP**

Date 7.2.2013

Previous date: -

**7. HANDLING AND STORAGE**

- 7.1 Precautions for safe handling**
- 7.2 Conditions for safe storage, including any incompatibilities**  
Keep container tightly closed.
- 7.3 Specific end use(s)**

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- 8.1 Control parameters**
- 8.1.1 Threshold limits**
- |         |                            |                               |
|---------|----------------------------|-------------------------------|
| Ammonia | 20 ppm (8 h)               | 50 ppm (15 min)               |
|         | 14 mg/m <sup>3</sup> (8 h) | 36 mg/m <sup>3</sup> (15 min) |
- 8.1.2 Other information on limit values**  
The values above are Finnish OEL values.
- 8.1.3 Limit values in other countries**  
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- 8.1.4 DNELs**  
No information available.
- 8.1.5 PNECs**  
No information available.
- 8.2 Exposure controls**
- 8.2.1 Appropriate engineering controls**  
Obey good laboratory practices, good hygiene and safety guidelines. Adequate ventilation needed. Immediately take off contaminated clothing and wash before reuse. Wash hands after handling. Eye washing equipment have to be available.
- 8.2.2 Individual protection measures**
- 8.2.2.2 Hand protection**  
Protective gloves complying with EN 374.
- 8.2.2.3 Eye/face protection**  
Tightly fitting goggles or whole mask (EN 166).
- 8.2.2.4 Skin protection**  
Working clothes.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

- 9.1 Important Health Safety and Environmental Information**
- 9.1.1 Appearance**  
Liquid.
- 9.1.2 Odour**  
No information available.
- 9.1.3 Odour threshold**  
No information available.
- 9.1.4 pH**  
No information available.
- 9.1.5 Melting point/freezing point**  
No information available.
- 9.1.6 Initial boiling point and boiling range**  
No information available.
- 9.1.7 Flash point**  
Not applicable.
- 9.1.8 Evaporation rate**  
No information available.
- 9.1.9 Flammability (solid, gas)**  
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- 9.1.10 Explosive properties**
- 9.1.10.1 Lower explosion limit**  
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- 9.1.10.2 Upper explosion limit**  
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**Ammonium Citrate Solution (251) Lead USP**

Date 7.2.2013

Previous date: -

<b>9.1.11</b>	<b>Vapour pressure</b>	N/I
<b>9.1.12</b>	<b>Vapour density</b>	N/I
<b>9.1.13</b>	<b>Relative density</b>	No information available.
<b>9.1.14</b>	<b>Solubility(ies)</b>	
<b>9.1.14.1</b>	<b>Water solubility</b>	Soluble.
<b>9.1.15</b>	<b>Partition coefficient: n-octanol/water</b>	No information available.
<b>9.1.16</b>	<b>Auto-ignition temperature</b>	Not applicable.
<b>9.1.17</b>	<b>Decomposition temperature</b>	No information available.
<b>9.1.18</b>	<b>Viscosity</b>	No information available.
<b>9.1.19</b>	<b>Explosive properties</b>	No information available.
<b>9.1.20</b>	<b>Oxidising properties</b>	No information available.
<b>9.2</b>	<b>Other information</b>	

**10. STABILITY AND REACTIVITY**

<b>10.1</b>	<b>Reactivity</b>	No information available.
<b>10.2</b>	<b>Chemical stability</b>	Stable in normal conditions.
<b>10.3</b>	<b>Possibility of hazardous reactions</b>	No information available.
<b>10.4</b>	<b>Conditions to avoid</b>	Strong heating.
<b>10.5</b>	<b>Incompatible materials</b>	N/I
<b>10.6</b>	<b>Hazardous decomposition products</b>	No information available.

**11. TOXICOLOGICAL INFORMATION**

<b>11.1</b>	<b>Information on toxicological effects</b>	
<b>11.1.1</b>	<b>Acute toxicity</b>	No hazard classification.
<b>11.1.2</b>	<b>Irritation and corrosion</b>	Causes skin irritation. Causes serious eye irritation.
<b>11.1.3</b>	<b>Sensitisation</b>	No hazard classification.
<b>11.1.4</b>	<b>Subacute, subchronic and prolonged toxicity</b>	No hazard classification.
<b>11.1.5</b>	<b>STOT-single exposure</b>	No hazard classification.
<b>11.1.6</b>	<b>STOT-repeated exposure</b>	No hazard classification.
<b>11.1.7</b>	<b>Aspiration hazard</b>	Not classified.

**12. ECOLOGICAL INFORMATION**

<b>12.1</b>	<b>Toxicity</b>	
<b>12.1.1</b>	<b>Aquatic toxicity</b>	

**Ammonium Citrate Solution (251) Lead USP**

Date 7.2.2013

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No ecological problems are to be expected when the product is handled and used with due care and attention.  
No hazard classification.

**12.2 Persistence and degradability****12.2.1 Biodegradation**

Tietoja ei ole saatavissa.

**12.3 Bioaccumulative potential**

No information available.

**12.4 Mobility in soil**

No information available.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Other adverse effects****13. DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods**

Disposal in compliance with local and national regulation.

**14. TRANSPORT INFORMATION**

	Land transport ADR/RID	Sea transport IMDG/IMO	Air transport ICAO/IATA
<b>14.1 UN number</b>			
<b>14.2 UN proper shipping name</b>			
<b>14.3 Transport hazard class(es)</b>			
<b>14.4 Packing group</b>			
<b>14.5 Environmental hazards</b>			
<b>Other information</b>			

**14.6 Special precautions for users****14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code****15. REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

REACH regulation, CLP regulation (EC).  
Finnish Occupational Exposure Limit values.

**15.2 Chemical safety assessment****16. OTHER INFORMATION****16.3 Key literature references and sources for data**

ECHA C&L Inventory.  
Harmonised classification according to CLP regulation.

**Ammonium Citrate Solution (251) Lead USP**

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**16.5 List of relevant R phrases, hazard statements, safety phrases and/or precautionary statements**

R34	Causes burns.
R36	Irritating to eyes.
R50	Very toxic to aquatic organisms.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.

**16.6 Training advice**

Appropriate handling of hazardous substances.

**16.8 Additional information available from:**

Oy FF-Chemicals Ab, Finland, Tel: 0358 (0)8 5563; ffc@ff-chemicals.fi

The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.