

**Citric Acid, Solution 20 w/v-%**

Date 8.2.2013

Previous date: -

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

Citric Acid, Solution 20 w/v-%

**1.1.2 Product code**

FF6364 20 L

**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

**Street address**

Teollisuustie 4

**Postcode and post office**

FI-90830 Haukipudas

Finland

**Telephone**

+358 8 5563 193

**Telefax**

+358 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

**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.

**Precautionary Statements**

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****CAS/EC and Reg. number**

5949-29-1

**Chemical name of the substance**

Citric acid monohydrate

**Concentration Classification**

20 %

Xi; R36;

Eye Irrit. 2, H319

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- 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. Immediately take off contaminated clothing. 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.
- 4.1.4 Eye contact**  
Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Contact an ophthalmologist.
- 4.1.5 Ingestion**  
Rinse mouth. Do NOT induce vomiting. Seek medical advice.
- 4.2 Most important symptoms and effects, both acute and delayed**  
Irritating to eyes and skin.
- 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**  
Toxic combustion gases may be liberated in event of fire.
- 5.3 Advice for firefighters**  
Fire fighters have to wear a pressurized respirator and chemical protection suit.

**6. ACCIDENTAL RELEASE MEASURES**

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Evacuate the area. Wear personal protective equipment. 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**  
4, 8, 13.

**7. HANDLING AND STORAGE**

- 7.1 Precautions for safe handling**  
Prevent emissions of vapour and mists in air. Avoid inhalation of vapours and mist. Avoid contact with skin, eyes or clothing. Use personal protective equipment and local exhaust.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Keep container tightly closed.

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**7.3 Specific end use(s)****8. EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****8.1.2 Other information on limit values**

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**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. Take care of sufficient ventilation. Immediately take off contaminated clothing and wash before reuse. Wash hands after handling.

**8.2.2 Individual protection measures****8.2.2.1 Respiratory protection**

Respirator if vapours or aerosols are escaped in air.

**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**

Protective clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES****9.1 Important Health Safety and Environmental Information****9.1.1 Appearance**

Liquid.

**9.1.2 Odour**

N/I

**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**

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**9.1.8 Evaporation rate**

No information available.

**9.1.9 Flammability (solid, gas)**

Not flammable.

**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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**9.1.11 Vapour pressure**

N/I

**9.1.12 Vapour density**

N/I

**9.1.13 Relative density**

N/I

**9.1.14 Solubility(ies)****9.1.14.1 Water solubility**

Freely soluble in water.

**9.1.15 Partition coefficient: n-octanol/water**

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**9.1.16 Auto-ignition temperature**

Not applicable.

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<b>9.1.17</b>	<b>Decomposition temperature</b>	N/I
<b>9.1.18</b>	<b>Viscosity</b>	N/I
<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> No information available.
<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 information available.
<b>11.1.2</b>	<b>Irritation and corrosion</b> 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> No hazard classification.
<b>12.2</b>	<b>Persistence and degradability</b>
<b>12.2.1</b>	<b>Biodegradation</b> No information available.
<b>12.3</b>	<b>Bioaccumulative potential</b> No information available.
<b>12.4</b>	<b>Mobility in soil</b> Mobile, water solution.

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**12.5 Results of PBT and vPvB assessment**

No information available.

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

Dispose of contents/container in accordance of local and national regulations.

**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).

**15.2 Chemical safety assessment**

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**16. OTHER INFORMATION****16.3 Key literature references and sources for data**

ECHA C&amp;L Inventory.

**16.4 Classification procedure**

CLP Regulation (1272/2008/EY)

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

R36 Irritating to eyes.

H319 Causes serious eye irritation.

**16.6 Training advice**

Appropriate handling of hazardous substances.

**16.8 Additional information available from:**

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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.