LORANN OILS, INC.

4518 Aurelius Road Office (800)862-8620
Lansing, MI 48910 Fax (517)882-0507

6040 – Citric Acid

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 07/27/2015 Version: 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : 6040 – Citric Acid

CAS number : 77-92-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Food industry: component

1.3. Details of the supplier of the safety data sheet

LorAnn Oils, Inc.
4518 Aurelius Road
Lansing, MI 48910
Telephone: 1.800.862.8620

1.4. Emergency telephone number

Emergency number : CHEMTREC: Within USA and Canada: 1.800.424.9300 Outside USA and Canada: +1 703 527 3887

SECTION 2 : Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Eye irritation, Category 2

2.2. Label elements

GHS label elements: The substance is classifed and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms :

Signal word : Warning

Hazard statement : H319 Causes serious eye irritation

Precautionary statement : P264 Wash skin thoroughly after handling
P280 Wear protective gloves / eye protection / face protection
P305/351/338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337/313 If eye irritation persists: Get medical advice/attention

SECTION 3: Composition/information on ingredients :

Substances : 100% Citric acid anhydrous

CAS number : 77-92-9

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

First-aid measures after inhalation : If breathed in, move person into fresh air.

First-aid measures after skin contact : Immediately flush skin with large amounts of water.

First-aid measures after eye contact : Remove contact lenses. Rinse immediately with plenty of water, also under the eyelids.

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First-aid measures after ingestion : Drink plenty of water. If swallowed, DO NOT induce vomiting.

4.2. Most Important Symptoms and Effects, both Acute and Delayed

Symptoms : No information available

4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

Treatment : No information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray, dry powder, foam, carbon dioxide (CO2)

5.2. Special hazards arising from the chemical

Do not use a solid water stream as it may scatter and spread fire. Hazardous decomposition proudcts formed under fire conditions. Exposure to decomposition products may be a hazard to health.

5.3. Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary. Use personal protective equipment. Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. In the event of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedure

Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation, especially in confined areas.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

6.3. Methods and materials for containment and cleaning up

Use mechanical handling equipment. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid creating dust. Do not breathe dust. Avoid contact with skin and eyes.
Normal measures for preventive fire protection.

Dust explosion class : St1

7.2. Conditions for safe storage, including any incompatibilities

Storage : Keep in an area equipped with acid resistant flooring. Keep container tightly closed in a dry and well-ventilated place. Do not store at temperatures above 86°F. Incompatible with strong bases and oxidizing agents. No decomposition if stored and applied as directed.

SECTION 8: Exposure controls/personal protection

Occupational exposure limits : Contains no substances with occupational exposure limit values.

Eye/Face protection : Safety goggles

Skin protection : Choose body protection according to the amount and concentration of the dangerous substances at the work place.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. General industrial hygiene practice. Do not breathe dust. Avoid contact with skin, eyes and clothing.

Respiratory protection : In the case of dust or aerosol formation use respirator with an approved filter. Half mask with a particle filter P2(EN 143).

Hand protection : Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer.

Appropriate Engineering Controls : Provide adequate ventilation

Environmental exposure controls : Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Crystalline
Color	: White
Odor	: Odorless
pH	: 1,8 at 5% 25°C
Evaporation rate	: N/A
Melting point/range	: Ca. 153°C
Boiling point	: N/A
Flash point	: N/A
Auto-ignition temperature	: N/A
Vapor pressure	: N/A
Density	: 1,665 g/cm³ at 20°C
Flammability	: Does not ignite
Water solubility	: Ca. 800 g/l at 20°C
Viscosity	: N/A
Decompression temperature	: N/A

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid dust formation

10.5. Incompatible materials

Strong bases, oxidizing agents

10.6. Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute dermal toxicity	
LD50 Dermal	> 2000 mg/kg (Species: Rat)

Acute toxicity (other routes of administration)	
LD50	725 mg/kg (Application route: i.p. Species: rat)
LD50	940 mg/kg (Application Route: i.p. Species mouse)

Skin corrosion/irritation	: May cause skin irritation in susceptible persons.
Serious eye damage/irritation	: Irritating to eyes
Respiratory or skin sensitization	: Does not cause skin sensitization
Germ cell mutagenicity	: In vivo tests did not show mutagenic effects
Carcinogenicity	: Not classified
Reproductive toxicity	: No toxicity to reproduction
Specific target organ toxicity (single exposure)	: Not classified

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Specific target organ toxicity (repeated exposure) : Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

Citric acid anhydrous	
LC50 fish	440 mg/l (48 h; Leuciscus idus [Golden orfe] static test) Method: OECD Test Guideline 203
EC50 Daphnia	1.535 mg/l (24 h; Daphnia magna [Water flea] static test)
Toxicity to Algae	425 mg/l (168 h; Scenedesmus quadricauda [Green algea] static test)
Toxicity to bacteria	>10000 mg/l (16 h; Pseudomonas putida)

12.2. Persistence and degradability

Citric acid anhydrous	
Biodegradability	97% (28d) Method: OECD Test Guideline 301B. Readily biodegradable.
	100% (19d) Method: OECD Test Guideline 301E. Readily biodegradable.

Citric acid anhydrous	
Biochemical Oxygen Demand (BOD)	526 mg/g
Chemical Oxygen Demand (COD)	728 mg/g

12.3. Bioaccumulative potential

Citric acid anhydrous	
Bioaccumulative potential	The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Where possible recycling is preferred to disposal or incineration. Can be landfilled or incinerated, when in compliance with local regulations. Waste codes should be assigned by the user based on the application for which the product was used. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of as unused product.

SECTION 14: Transport information

ADR: Not dangerous goods.

DOT: Not a hazardous material.

TDG: Not dangerous goods.

IATA: Not dangerous goods.

IMDG: Not dangerous goods.

RID: Not dangerous goods.

SECTION 15 : Regulatory information

Major Accident Hazard Legislation : 96/82/EC Update: 2003 Directive 96/82/EC does not apply

Notification status

CERCLA: Not considered hazardous
SARA Title III: Not considered hazardous
WHMIS: Class E
TSCA: On TSCA Inventory
EINECS: On the inventory, or in compliance with the inventory
AICS: On the inventory, or in compliance with the inventory

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DSL: All components of this product are on the Canadian DSL list
ENCS: On the inventory, or in compliance with the inventory
KECI: On the inventory, or in compliance with the inventory
PICCS: On the inventory, or in compliance with the inventory
IECSC: On the inventory, or in compliance with the inventory
NZIoC: On the inventory, or in compliance with the inventory

SECTION 16: Other information

Other information : DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.