



SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

CITRIC ACID MONOHYDRATE

Version 8.0

Print Date 2022/12/14

Revision date / valid from 2022/12/14

MSDS code: MCIT200

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

1.1. Product identifier

Trade name : CITRIC ACID MONOHYDRATE
Substance name : citric acid, monohydrate
Index-No. : 607-750-00-3
CAS-No. : 5949-29-1
EC-No. : 201-069-1
EU REACH-Reg. No. : 01-2119457026-42-xxxx

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

Use of the Substance/Mixture : Industrial use, Professional use, Consumer use, Detergent, Cleaning, care and disinfection, Food additive, Cosmetics, personal care products, Formulation, plastics, coatings/paints, agricultural industry, Laboratory chemicals, Water treatments, Metal surface treatment, paper industry, scale inhibitor

Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : The Soap Kitchen Ltd Supplies for Candles Ltd

Telephone : 01237420872
Telefax :
E-mail address : enquiries@thesoapkitchen.co.uk

1.4. Emergency telephone number

Emergency telephone :
number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation S.I. 2019/720 (GB CLP)

Regulation S.I. 2019/720 (GB CLP)

Hazard class	Hazard category	Target Organs	Hazard statements
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Eye irritation	Category 2	---	H319
Specific target organ toxicity - single exposure	Category 3	Respiratory system	H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

Human Health : See section 11 for toxicological information.

Physical and chemical hazards : See section 9/10 for physicochemical information.

Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation S.I. 2019/720 (GB CLP)

Hazard symbols : 

Signal word : Warning

Hazard statements : H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Precautionary statements

Prevention : P261 Avoid breathing dust.
P280 Wear eye protection/ face protection.

Response : P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

Storage : P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal : P501 Dispose of contents/ container to an approved waste disposal plant.

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Hazardous components which must be listed on the label:

- citric acid, monohydrate

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Dust can form an explosive mixture in air. Combustible material

SECTION 3: Composition/information on ingredients

3.1. Substances

		Classification (Regulation S.I. 2019/720 (GB CLP))	
Hazardous components	Amount [%]	Hazard class / Hazard category	Hazard statements
citric acid, monohydrate			
Index-No. : 607-750-00-3	<= 100	Eye Irrit.2 STOT SE3	H319
CAS-No. : 5949-29-1			H335
EC-No. : 201-069-1			
EU REACH- : 01-2119457026-42-xxxx			
Reg. No.			

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Take off all contaminated clothing immediately.

If inhaled : Remove to fresh air. If symptoms persist, call a physician.

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In case of skin contact	: Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 5 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed	: Rinse mouth with water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Protection of First Aid Responders	: First Aid responders should pay attention to self-protection and use the recommended protective clothing.

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

Symptoms	: irritant effects
Effects	: Irritating to eyes. May cause respiratory irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment	: Treatment according to the doctor's diagnosis of the patient.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Water spray, foam, dry powder or CO ₂ .
Unsuitable extinguishing media	: High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: Incomplete combustion may form toxic pyrolysis products.
Hazardous combustion products	: Carbon monoxide, Carbon dioxide (CO ₂)

5.3. Advice for firefighters

Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Wear personal protective equipment.
Further advice	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	: Use personal protective equipment. Keep away unprotected
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persons. Ensure adequate ventilation. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Use mechanical handling equipment. Keep in suitable, closed containers for disposal.

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.

Advice on protection against fire and explosion : Avoid dust formation. Normal measures for preventive fire protection.

Further information on storage conditions : Keep tightly closed in a dry and cool place. Avoid moisture.

Advice on common storage : Keep away from food, drink and animal feedingstuffs. Incompatible with strong bases and oxidizing agents.

Storage temperature : 10 - 30 °C

7.3. Specific end use(s)

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Specific use(s) : Identified use: See table in front of appendix for a complete overview of identified uses.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

No DNEL value was derived. :

Other Occupational Exposure Limit Values

(Additional) : Contains no substances with occupational exposure limit values.
Information : Contains no substances with occupational exposure limit values.

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Predicted No Effect Concentration (PNEC)

Fresh water	:	0.44 mg/l
Marine water	:	0.044 mg/l
Fresh water sediment	:	3.46 mg/kg dry weight (d.w.)
Marine sediment	:	34.6 mg/kg dry weight (d.w.)
Sewage treatment plant (STP)	:	> 1000 mg/l
Soil	:	33.1 mg/kg dry weight (d.w.)
	:	

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : Required, if exposure limit is exceeded (e.g. OEL).
Respiratory protection complying with EN 141.
Dust-mask
Particle filter:P2
Required if dust is released

Hand protection

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Advice : Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves should be replaced at first signs of wear.
Protective gloves
The following materials are suitable:
natural rubber
Nitrile rubber
butyl-rubber
PVC

Eye protection

Advice : Safety goggles

Skin and body protection

Advice : Wear personal protective equipment.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : Crystalline powder

Physical state : solid

Colour : white

Odour : odourless

Odour Threshold : No data available

Melting point/range : 135 - 152 °C

Boiling point : No data available

Flammability (solid, gas) : does not ignite

Upper explosion limit / Upper flammability limit : Not applicable

Lower explosion limit / Lower flammability limit : Not applicable

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Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	> 170 °C To avoid thermal decomposition, do not overheat.
Self-Accelerating decomposition temperature (SADT)	:	No data available
pH	:	1.8 (20 °C) Concentration: 50 g/l 2.2 (20 °C) Concentration: 10 g/l
Viscosity		
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	Not applicable
Flow time	:	No data available
Solubility(ies)		
Water solubility	:	592 g/l (20 °C) 776 g/l (25 °C)
Solubility in other solvents	:	Solvent: Ethanol soluble
Dissolution Rate	:	No data available
Partition coefficient: n-octanol/water	:	log Pow: -1.6 anhydrous substance log Pow: -1.8 anhydrous substance
Dispersion Stability	:	No data available
Vapour pressure	:	0.0000022 Pa (25 °C) anhydrous substance
Relative density	:	No data available
Density	:	1.54 g/cm ³ (20 °C)
Bulk density	:	No data available
Relative vapour density	:	Not applicable

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Particle characteristics
No data available

9.2 Other information

Explosives : Dust can form an explosive mixture in air.
Oxidizing properties : not oxidising

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Exothermic reaction with: Oxidizing agents Reducing agents
Bases With most metals.

10.4. Conditions to avoid

Conditions to avoid : Risk of dust explosion.Heat, flames and sparks.
Thermal decomposition : > 170 °C
To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Materials to avoid : Oxidizing agents, Reducing agents, Incompatible with bases.
Incompatible with acids.

10.6. Hazardous decomposition products

Hazardous decomposition products : Fire may cause evolution of: Carbon oxides

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Acute toxicity

Oral

LD50 : 5400 mg/kg (Mouse, male and female; Test substance: Citric acid)
(OECD Test Guideline 401)

Inhalation

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No data available

Dermal

LD50 : > 2000 mg/kg (Rat, male and female; Test substance: Citric acid)
(OECD Test Guideline 402)

Irritation

Skin

Result : No skin irritation (Rabbit) (OECD Test Guideline 404)

Eyes

Result : Causes serious eye irritation. (OECD Test Guideline 405)

Sensitisation

Result : not sensitizing

CMR effects

CMR Properties

Carcinogenicity : It is not considered carcinogenic.
Mutagenicity : In vitro genetic toxicity studies were negative in some cases and
positive in other cases
In vivo tests did not show mutagenic effects
Reproductive toxicity : It is not considered toxic for reproduction.

Genotoxicity in vitro

Result : negative (reverse mutation assay; Salmonella typhimurium; with
and without metabolic activation) (OECD Test Guideline 471)
positive (Micronucleus test; Human lymphocytes; no) (OECD Test
Guideline 487)

Genotoxicity in vivo

Result : negative (Mammalian Bone Marrow Chromosomal Aberration Test;
Rat, male; Bone marrow) (Oral;) (OECD Test Guideline 475)
negative (Chromosome aberration test in vivo; Rat, male and
female) (Oral;) (Regulation (EC) No. 440/2008, Annex, B.22)

Specific Target Organ Toxicity

Single exposure

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Inhalation : Target Organs: Respiratory systemMay cause respiratory irritation.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

Not applicable,

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Endocrine disrupting properties

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 12: Ecological information

12.1. Toxicity

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Acute toxicity

Fish

LC50 : 440 mg/l (Leuciscus idus melanotus, mortality; 48 h) (static test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

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LC50 : 1,535 mg/l (Daphnia magna (Water flea), mortality; 24 h) (static test)

12.2. Persistence and degradability

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Persistence and degradability

Persistence

Result : No data available

Biodegradability

Result : 97 % (10 mg/l; Related to: CO₂ formation (% of the theoretical value).; Exposure Time: 28 d)(OECD Test Guideline 301B)Readily biodegradable.

12.3. Bioaccumulative potential

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Bioaccumulation

Result : Bioaccumulation is not expected.

12.4. Mobility in soil

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Mobility

Water : The product is water soluble.

Air : not volatile

12.5. Results of PBT and vPvB assessment

Data for the product

Results of PBT and vPvB assessment

Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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Results of PBT and vPvB assessment

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Endocrine disrupting properties

Data for the product

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
------------	--------------------------	-------------------

Endocrine disrupting potential : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7. Other adverse effects

Data for the product

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.

Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information



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Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number or ID number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Component:	citric acid, monohydrate	CAS-No. 5949-29-1
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EU. Regulation EC No. : ; The substance/mixture does not fall under this legislation.
689/2008

EU. REACH, Annex XVII, : Point Nos.: , 75; Listed
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

EU. Regulation : EC Number: , 201-069-1; Category 6 - Substances included in
528/2012/EU concerning Annex I or IA to Directive 98/8/EC; Minimum degree of purity of
the making available on the active substance (The purity indicated in this column was

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the market and use of
biocidal products, Annex
I: Active substances

the minimum degree of purity of the active substance
evaluated. The active substance in the product placed on the
market can be of equal or different purity if it has been proven
to be technically equivalent to the evaluated active substance):
995 g/kg

EU. Directive
2012/18/EU (SEVESO
III) on major accident
hazards involving
dangerous substances,
Annex I

: ; The substance/mixture does not fall under this legislation.

Germany. Ordinance on
Facilities Handling
Substances that are
Hazardous to Water,
((AwSV of 21 April 2017),
UBA, BAAnz AT), as
amended

: WGK 1: slightly hazardous to water: 8,248

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Full text of the Notes referred to under section 3.

Abbreviations and Acronyms

AU AIICL	Australia. Industrial Chemicals Act (AIIC) List
BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level

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DSL	Canada. Environmental Protection Act, Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ENCS (JP)	Japan. Kashin-Hou Law List
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
IECSC	China. Inventory of Existing Chemical Substances
INSQ	Mexico. National Inventory of Chemical Substances
ISHL (JP)	Japan. Inventory of Industrial Safety & Health
KECI (KR)	Korea. Existing Chemicals Inventory
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NDSL	Canada. Environmental Protection Act. Non-Domestic Substances List
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
NZIOC	New Zealand. Inventory of Chemicals
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
ONT INV	Canada. Ontario Inventory List
PBT	persistent, bioaccumulative and toxic
PHARM (JP)	Japan. Pharmacopoeia Listing
PICCS (PH)	Philippines. Inventory of Chemicals and Chemical Substances
PNEC	predicted no-effect concentration
REACH Auth. No.:	REACH Authorisation Number
REACH AuthAppC. No.	REACH Authorisation Application Consultation Number
STOT	specific target organ toxicity
SVHC	substance of very high concern
TCSI	Taiwan. Existing Chemicals Inventory
TH INV	Thailand. Existing Chemicals Inventory from FDA
TSCA	US. Toxic Substances Control Act
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
VN INVL	Vietnam. National Chemical Inventory
vPvB	very persistent and very bioaccumulative

Further information

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Key literature references and sources for data : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Methods used for product classification : The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.

Hints for trainings : The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.

Other information : The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.

The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

|| Indicates updated section.