

## Citric acid monohydrate

33114H-6X1KG

Version 2.0

Revision Date 15.04.2022

Supersedes 1

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

#### 1.1. Product identifier

Product name : Citric acid monohydrate  
SDS-number : 000000020897  
Type of product : Substance  
Remarks : SDS according to Art. 31 of Regulation (EC) 1907/2006.  
Chemical name : Citric acid monohydrate  
Index-No. : 607-750-00-3  
REACH Registration Number : no data available

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

Use of the Substance/Mixture : Laboratory chemicals  
Uses advised against : none

#### 1.3. Details of the supplier of the safety data sheet

Company	: Honeywell International Inc. 115 Tabor Road 07950-2546 Morris Plains USA	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
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Telephone :  
For further information, please contact: : [SafetyDataSheet@Honeywell.com](mailto:SafetyDataSheet@Honeywell.com)

#### 1.4. Emergency telephone number

Emergency telephone number : +1-703-527-3887 (ChemTrec-Transport)  
+1-303-389-1414 (Medical)  
Country based Poison : see chapter 15.1

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Control Center

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**REGULATION (EC) No 1272/2008**

Eye irritation Category 2  
H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure Category 3 - Respiratory system  
H335 May cause respiratory irritation.

**2.2. Label elements**

**REGULATION (EC) No 1272/2008**

Hazard pictograms



Signal word

: Warning

Hazard statements

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

Precautionary statements

: P261 Avoid breathing dust/ fume/ gas/ mist/  
vapours/ spray.  
P280 Wear protective gloves/ eye protection/  
face protection.  
P304 + P340 IF INHALED: Remove person to fresh  
air and keep comfortable for breathing.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water  
for several minutes. Remove contact  
lenses, if present and easy to do.  
Continue rinsing.  
P403 + P233 Store in a well-ventilated place. Keep  
container tightly closed.  
P501 Dispose of contents/ container to an  
approved waste disposal plant.

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### 2.3. Other hazards

Potential dust explosion hazard.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
Citric acid monohydrate	5949-29-1 607-750-00-3 201-069-1	Eye Irrit. 2; H319 STOT SE 3; H335	100 %	

### 3.2. Mixture

Not applicable

Occupational Exposure Limit(s), if available, are listed in Section 8.  
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:*

First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

*Inhalation:*

Remove to fresh air. Call a physician if irritation develops or persists.

*Skin contact:*

After contact with skin, wash immediately with plenty of soap and water. Call a physician if irritation develops or persists.

*Eye contact:*

Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. Consult a physician.

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### *Ingestion:*

When swallowed, allow water to be drunk. Call a physician immediately.

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

No data available

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

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms. :

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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### *Suitable extinguishing media:*

Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder

#### *Extinguishing media which shall not be used for safety reasons:*

High volume water jet

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

Fire may cause evolution of:  
carbon oxides (CO, CO<sub>2</sub>).

### **5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

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Use personal protective equipment. Provide adequate ventilation. Avoid dust formation.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. Do not allow run-off from fire fighting to enter drains or water courses.

### 6.3. Methods and materials for containment and cleaning up

Use mechanical handling equipment.  
Pick for disposal in tightly closed containers

### 6.4. Reference to other sections

For personal protection see section 8.

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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

*Advice on safe handling:*

Wear personal protective equipment. Avoid dust formation. Avoid contact with eyes.

*Advice on protection against fire and explosion:*

Keep away from heat and sources of ignition.

*Hygiene measures:*

Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink.

### 7.2. Conditions for safe storage, including any incompatibilities

*Further information on storage conditions:*

Store in original container. Keep in a dry, cool place. Keep containers tightly closed in a dry, cool and well-ventilated place.

*Advice on common storage:*

Do not store together with: alkalies Oxidizing agents

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**7.3. Specific end use(s)**

no additional data available

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

**DNEL/ PNEC-Values**

No DNEL-data available.

Citric acid monohydrate					No data available
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Component	Environmental compartment / Value	Remarks
Citric acid monohydrate	Fresh water: 0,44 mg/l	Assessment factor: 1000
Citric acid monohydrate	Marine water: 0,044 mg/l	Assessment factor: 10000
Citric acid monohydrate	Sewage treatment plant: 1000 mg/l	Assessment factor: 10
Citric acid monohydrate	Fresh water sediment: 34,6 mg/kg dw	
Citric acid monohydrate	Marine sediment: 3,46 mg/kg dw	
Citric acid monohydrate	Soil: 33,1 mg/kg dw	

**8.2. Exposure controls**

**Occupational exposure controls**

Do not breathe dust.

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511;

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safety shoes EN-ISO 20345.

### Personal protective equipment

#### *Respiratory protection:*

In the case of dust or aerosol formation use respirator with an approved filter.

#### *Hand protection:*

Glove material: Natural Latex

Break through time: > 480 min

Glove thickness: 0,6 mm

Lapren®706

Gloves must be inspected prior to use.

Replace when worn.

Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.

Due to varying conditions ( e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.

Manufacturer´s directions for use should be observed because of great diversity of types .

Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

#### *Eye protection:*

Safety goggles

#### *Skin and body protection:*

Protective suit

### Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state : solid

Colour : white

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Odour	:	odourless
molecular weight	:	210,14 g/mol
Melting point/range	:	ca. 135 - 152 °C
Flammability	:	The product is not flammable.
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	170 °C Decomposition temperature
pH	:	1,8 Concentration: 50 g/l at 20 °C
Auto-ignition temperature	:	not auto-flammable
Viscosity, kinematic	:	No data available
Water solubility	:	ca. 1.630 g/l at 20 °C
Partition coefficient: n-octanol/water	:	log Pow -1,72 at: 20 °C
Vapour pressure	:	No data available
Density	:	ca. 1,54 g/cm <sup>3</sup> at 20 °C
Bulk density	:	ca. 900 kg/m <sup>3</sup>



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Relative vapour density : No data available

### 9.2 Other Information

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : No data available

Viscosity, dynamic : No data available

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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under recommended storage conditions.

### 10.2. Chemical stability

>170 °C  
Decomposition temperature

### 10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

### 10.4. Conditions to avoid

Avoid dust formation.  
To avoid thermal decomposition, do not overheat.

### 10.5. Incompatible materials

Strong oxidizing agents  
Metals  
Reducing agents  
Alkalis

### 10.6. Hazardous decomposition products

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In case of fire hazardous decomposition products may be produced such as:

Carbon dioxide (CO<sub>2</sub>)

Carbon monoxide

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

*Acute oral toxicity:*

LD50

Species: Mouse

Value: 5.400 mg/kg

Method: OECD Test Guideline 401

*Acute dermal toxicity:*

LD50

Species: Rat

Value: > 2.000 mg/kg

Method: OECD Test Guideline 402

*Acute inhalation toxicity:*

Not classified due to data which are conclusive although insufficient for classification.

*Skin irritation:*

Species: Rabbit

Result: slight irritation

Method: OECD Test Guideline 404

*Eye irritation:*

Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

*Respiratory or skin sensitisation:*

No data available

*Carcinogenicity:*

Species: not specified

Note: No data available

*Germ cell mutagenicity:*

Note: Not classified due to data which are conclusive although insufficient for classification.

*Reproductive toxicity:*

Species: not specified

Remarks: Not classified due to data which are conclusive although insufficient for classification.

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*STOT - single exposure:*

Remarks: Classification based on Annex VI of regulation 1272/2008/EC.

*Aspiration hazard:*

No data available

### 11.2. Information on other hazards

Endocrine disrupting properties

No data available

*Other information:*

Toxicological data applies only to the water free substance.

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## SECTION 12: Ecological information

### 12.1. Toxicity

*Toxicity to fish:*

LC50

Species: *Leuciscus idus* (Golden orfe)

Value: 440 mg/l

Exposure time: 96 h

*Toxicity to aquatic plants:*

Not classified due to data which are conclusive although insufficient for classification.

*Toxicity to aquatic invertebrates:*

LC50

Species: *Daphnia magna* (Water flea)

Value: 1.535 mg/l

Exposure time: 24 h

### 12.2. Persistence and degradability

*Biodegradability:*

Readily biodegradable.

### 12.3. Bioaccumulative potential

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Bioaccumulation is unlikely.

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

No data available

### 12.6. Endocrine disrupting properties

No data available

### 12.7. Other adverse effects

No data available

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## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

*Product:*

Dispose according to legal requirements.

*Packaging:*

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

*Further information:*

Provisions relating to waste:  
EC Directive 2006/12/EC; 2008/98/EEC  
Regulation No. 1013/2006

For personal protection see section 8.

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## SECTION 14: Transport information

### 14.1 UN number

ADR/RID:Not dangerous goods    IMDG:Not dangerous goods    IATA:Not dangerous goods

### 14.2 UN proper shipping name

ADR/RID:Not dangerous goods  
IMDG:Not dangerous goods  
IATA:Not dangerous goods

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**14.3 Transport hazard class(es)**

**14.4 Packaging group**

**14.5 Environmental hazards**

ADR/RID:no

Marine pollutant: no

**14.6 Special precautions for user**

No data available

**14.7 Maritime transport in bulk according to IMO instruments**

No data available

**SECTION 15: Regulatory information**

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1\%$ (w/w).
Directive 2012/18/EC		Not applicable

**Poison Control Center**

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+35929154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888

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Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
Munich : 089/19240	
Latvia	+37167042473

Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420 112 (begär Gifinformation);+46104566786
Sweden	
Switzerland	145
United Kingdom	(+44) 844 892 0111

**Other inventory information**

US. Toxic Substances Control Act  
On TSCA Inventory

Australia. Industrial Chemicals Act (AIC), as amended  
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)  
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List  
On the inventory, or in compliance with the inventory

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Korea. Existing Chemicals Inventory (KECI)

On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)

On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)

On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand

On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

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## SECTION 16: Other information

### Text of H-statements referred to under heading 3

Citric acid monohydrate : H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

### Further information

All directives and regulations refer to amended versions.

Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:

EC European Community

CAS Chemical Abstracts Service

DNEL Derived no effect level

PNEC Predicted no effect level

vPvB Very persistent and very bioaccumulative substance

PBT Persistent, bioaccumulative und toxic substance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not

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to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.