



SAFETY DATA SHEET

CITRIC ACID

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME: CITRIC ACID

PRODUCT NO: RM076

SYNONYMS, TRADE NAMES: 2-HYDROXY 1, 2, 3-PROPANETRICARBOXYLIC ACID MONOHYDRATE

SUPPLIER: J M Loveridge Ltd
 Unit 5, Kingsway
 Walworth Industrial Estate, Andover
 Hampshire, SP10 5LQ
 +44 (0) 1264 367610
 +44 (0) 1264 351761
 Mr. S Knight – admin@jmloveridge.com

EMERGENCY CONTACT NUMBER:

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Regulation (EC) No 1272/2008			
Hazard Class	Hazard Category	Target Organs	Hazard Statements
Serious eye damage/eye irritation	Category 2	---	H319

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

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Directive 67/548/EEC or 1999/45/EC	
Hazard Symbol/Category of Danger	Risk Phrases
Irritant (Xi)	R36

For the full text of the R-Phrases 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 for physicochemical information
 Potential Environmental Effects: See Section 12 for environmental information

Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard Symbols:



Signal Word: Warning

Hazard Statements: H319 – Causes serious eye irritation

Precautionary Statements: P264 – Wash hands thoroughly after handling
P280 – Wear protective gloves/protective clothing/eye protection/face protection

Response: 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

Additional Labelling: EUH210 – Safety Data Sheet available on request

Hazardous Components which must be listed on the label: Citric Acid, Monohydrate

Other Hazards: For results of PBT and vPvB assessment see Section 12.5

3 COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Hazardous Components	Amount (%)	Classification (Regulation (EC) No 1272/2008)		Classification (67/548/EEC)
		Hazard class/Hazard category	Hazard statements	
Citric Acid, monohydrate CAS No: 5949-29-1 EC-No: 201-069-1 Registration: 01-2119457026-42-xxxx	<= 100	Eye Irrit.2	H319	Irritant; Xi; R36

For the full text of the R-Phrases mentioned in this Section, see Section 16

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

4 FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

IF INHALED

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

IN CASE OF SKIN CONTACT

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician

IN CASE OF EYE CONTACT

Immediately flush eye(s) with plenty of water. If symptoms persist, call a physician

IF SWALLOWED

Clean mouth with water and drink afterwards plenty of water. If symptoms persist, call a physician

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

SYMPTOMS

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

EFFECTS

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

**INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED
TREATMENT**

Treat symptomatically. No further information available

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA**SUITABLE EXTINGUISHING MEDIA**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

UNSUITABLE EXTINGUISHING MEDIA

None known

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE**SPECIFIC HAZARDS DURING FIRE-FIGHTING**

Hazardous decomposition products formed under fire conditions. Carbon oxides

ADVICE FOR FIREFIGHTERS**SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS**

In the event of fire, wear self-contained breathing apparatus

FURTHER INFORMATION

No further information available

6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES**PERSONAL PRECAUTIONS**

Wear personal protective equipment. Keep people away from and upwind of spill/leak. Avoid dust formation.

ENVIRONMENTAL PRECAUTIONS**ENVIRONMENTAL PRECAUTIONS**

Do not flush into surface water or sanitary sewer system

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. Flush with plenty of water.

REFERENCE TO OTHER SECTIONS

For personal protection see Section 8

7 HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING**ADVICE ON SAFE HANDLING**

Avoid dust formation. Keep tightly closed in a dry and cool place. Provide for appropriate exhaust ventilation and dust collection at machinery

HYGIENE MEASURES

Take off all contaminated clothing immediately. Wash hands before breaks and at the end of workday. Avoid contact with skin and eyes. Avoid dust formation

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**REQUIREMENTS FOR STORAGE AREAS AND CONTAINERS**

No special storage conditions required

ADVICE ON PROTECTION AGAINST FIRE AND EXPLOSION

Avoid dust formation. Fine dust dispersed in air may ignite

FURTHER INFORMATION ON STORAGE CONDITIONS

Keep container tightly closed. Keep in a dry place. Avoid moisture

ADVICE ON COMMON STORAGE

Incompatible with oxidizing agents. Alkalis

GERMAN STORAGE CLASS

11 Combustible Solids

SPECIFIC END USE(S)**SPECIFIC USE(S)**

No information available

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

Other Occupational Exposure Limit Values	
(Additional) Information:	Contains no substances with occupational exposure limit values Contains no substances with occupational exposure limit values
Component:	Citric Acid, monohydrate CAS-No: 5949-29-1
Predicted No Effect Concentration (PNEC)	

Fresh Water:	0.44 mg/l
Marine Water:	0.044 mg/l
Fresh Water Sediment:	3.46 mg/kg dwt
Marine Sediment:	34.6 mg/kg dwt
Sewage Treatment Plant (STP):	>1000 mg/l
Soil:	33.1 mg/kg dwt

EXPOSURE CONTROLS**APPROPRIATE ENGINEERING CONTROLS**

Refer to protective measures listed in Sections 7 and 8

PERSONAL PROTECTIVE EQUIPMENT*Respiratory protection***ADVICE**

Required if dust is released. Dust-mask. Particle filter: P2. Particle filter: P3

*Hand protection***ADVICE**

Protective gloves. The following materials are suitable: natural rubber, nitrile rubber, butyl-rubber, PVC

*Eye protection***ADVICE**

Tightly fitting safety goggles

*Skin and body protection***ADVICE**

Protective suit

ENVIRONMENTAL EXPOSURE CONTROLS**GENERAL ADVICE**

Do not flush into surface water or sanitary sewer system

9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Form:	Solid
Colour:	White
Odour:	Odourless
Odour Threshold:	No data available
pH:	1.8 (50 g/l; 20°C)
Melting Point/Range:	135 – 152°C
Boiling Point:	No data available
Flash Point:	Not applicable
Evaporation Rate:	Not applicable
Flammability (solid, gas)	Does not ignite
Upper Explosion Limit:	Not applicable
Lower Explosion Limit:	Not applicable
Vapour Pressure:	Not applicable
Relative Vapour Density:	Not applicable
Density:	1.54 g/cm ³ (20°C)
Water Solubility:	676 g/l (25°C) soluble
Partition Coefficient: n-octanol/water:	No data available
Auto-ignition Temperature:	No data available
Thermal Decomposition:	> 170°C to avoid thermal decomposition, do not overheat
Viscosity, kinematic:	Not applicable
Explosive Properties:	EU Legislation: Dust may form explosive mixture in air
Oxidizing Properties:	Not oxidizing
Other Information	
Bulk Density:	550-950 kg/m ³ (20°C)

10 STABILITY AND REACTIVITY

REACTIVITY - ADVICE

No decomposition if stored and applied as directed

CHEMICAL STABILITY - ADVICE

Stable under normal conditions

POSSIBILITY OF HAZARDOUS REACTIONS

HAZARDOUS REACTIONS

Exothermic reaction with: Oxidizing agents. Reducing agents. Bases with most metals.

HAZARDOUS REACTIONS

Dust can form an explosive mixture in air.

CONDITIONS TO AVOID

THERMAL DECOMPOSITION

>170°C to avoid thermal decomposition do not overheat.

MATERIALS TO AVOID

Incompatible with strong bases and oxidizing agents. Strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS

Fire may cause evolution of: Carbon oxides

11 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY

ORAL

Please find this information in the listing of the component/components below in the SDS.

DERMAL

Please find this information in the listing of the component/components below in the SDS.

IRRITATION

SKIN – RESULT

Please find this information in the listing of the component/components below in the SDS.

EYES – RESULT

Please find this information in the listing of the component/components below in the SDS.

SENSITISATION – RESULT

Please find this information in the listing of the component/components below in the SDS.

CMR EFFECTS

CMR PROPERTIES

CARCINOGENICITY

Please find this information in the listing of the component/components below in the SDS.

MUTAGENICITY

Please find this information in the listing of the component/components below in the SDS.

REPRODUCTIVE TOXICITY

Please find this information in the listing of the component/components below in the SDS.

Component:	Citric Acid, Monohydrate	CAS-No. 5949-29-1
Acute Toxicity		
Oral		
LD50:	5400 mg/kg (mouse)	
Dermal		
LD50:	>2000 mg/kg)	
Irritation		
Skin		
Result:	(No skin irritation)	
Eyes		
Result:	(Irritating to eyes)	
Sensitisation		
Result:	(Does not cause skin sensitisation)	
CMR Effects		
CMR Properties		
Carcinogenicity:	It is not considered carcinogenic	
Mutagenicity:	It is not considered mutagenic	
Reproductive Toxicity:	It is not considered toxic for reproduction	
Carcinogenicity		

12 ECOLOGICAL INFORMATION

TOXICITY

Component:	Citric Acid, Monohydrate	CAS-No. 5949-29-1
Acute Toxicity		
Fish		
LC50:	440 mg/l	

Toxicity to daphnia and other aquatic invertebrates	
LC50:	1535 mg/l (Daphnia magna (Water flea); 24 h)

PERSISTENCE AND DEGRADABILITY

Component:	Citric Acid, Monohydrate	CAS-No. 5949-29-1
Persistence and Degradability		
Persistence		
Result:	No data available	
Biodegradability		
Result:	Biodegradable	

BIOACCUMULATIVE POTENTIAL

Component:	Citric Acid, Monohydrate	CAS-No. 5949-29-1
Bioaccumulation		
Result:	Bioaccumulation is not expected	

MOBILITY IN SOIL

Component:	Citric Acid, Monohydrate	CAS-No. 5949-29-1
Mobility		
No data available		

RESULTS OF PBT AND VPVB ASSESSMENT

Component:	Citric Acid, Monohydrate	CAS-No. 5949-29-1
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 nor very bioaccumulating (vPvB).	

OTHER ADVERSE EFFECTS

Additional ecological information		
Result:	Do not flush into surface water or sanitary sewer system	

13 DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT

Disposal together with normal waste is not allowed. Do not let product enter drains. Can be landfilled, when in compliance with local regulations.

CONTAMINATED PACKAGING

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. Clean container with water.

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.

14 TRANSPORT INFORMATION

Not dangerous goods for ADR, RID and IMDG.

UN NUMBER

Not applicable

UN PROPER SHIPPING NAME

Not applicable

TRANSPORT HAZARD CLASS(ES)

Not applicable

PACKAGING GROUP

Not applicable

ENVIRONMENTAL HAZARDS

Not applicable

SPECIAL PRECAUTIONS FOR USER

Not applicable

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

IMDG

Not applicable

15 REGULATORY INFORMATION

SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE
OTHER REGULATIONS

Occupational restrictions: Take note of Dir 92/85/EEC on the safety and health of pregnant workers at work and of Dir 94/33/EC on the protection of young people at work.

CITRIC ACID, MONOHYDRATE

EU Regulation No 1451/2007 [Biocides], Annex I, Active substances identified as existing (OJ (L 325) Listed EC Number: 201-069-1

NOTIFICATION STATUS

CITRIC ACID, MONOHYDRATE

Regulatory List	Notification	Notification Number
AICS	YES	
DSL	YES	
KO INV PRE	YES	9212-1218
PICCS (PH)	YES	

CHEMICAL SAFETY ASSESSMENT

No data available

16 OTHER INFORMATION

Full text of R-Phrases referred to under Sections 2 and 3

R36	Irritating to eyes
H319	Causes serious eye irritation

DISCLAIMER

The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this SDS is to the best of JML's knowledge correct at the time of publication. However, no guarantee is given to its accuracy, reliability or completeness and the information may not be valid if the product is used in combination with other materials or process. It is the responsibility of the user to ensure that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulatory requirements.