



# SAFETY DATA SHEET

## CITRIC ACID

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### 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

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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:

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### 2 HAZARDS IDENTIFICATION

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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

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### 3 COMPOSITION/INFORMATION ON INGREDIENTS

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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

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### 4 FIRST-AID MEASURES

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**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

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**5 FIRE-FIGHTING MEASURES**

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**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

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**6 ACCIDENTAL RELEASE MEASURES**

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**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

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**7 HANDLING AND STORAGE**

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**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

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**8 EXPOSURE CONTROLS/PERSONAL PROTECTION**


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**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

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## 9 PHYSICAL AND CHEMICAL PROPERTIES

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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 <sup>3</sup> (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 <sup>3</sup> (20°C)

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## 10 STABILITY AND REACTIVITY

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### 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

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## 11 TOXICOLOGICAL INFORMATION

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### 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
<b>Acute Toxicity</b>		
<b>Oral</b>		
LD50:	5400 mg/kg (mouse)	
<b>Dermal</b>		
LD50:	>2000 mg/kg)	
<b>Irritation</b>		
<b>Skin</b>		
Result:	(No skin irritation)	
<b>Eyes</b>		
Result:	(Irritating to eyes)	
<b>Sensitisation</b>		
Result:	(Does not cause skin sensitisation)	
<b>CMR Effects</b>		
<b>CMR Properties</b>		
Carcinogenicity:	It is not considered carcinogenic	
Mutagenicity:	It is not considered mutagenic	
Reproductive Toxicity:	It is not considered toxic for reproduction	
<b>Carcinogenicity</b>		

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## 12 ECOLOGICAL INFORMATION

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### TOXICITY

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

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

## PERSISTENCE AND DEGRADABILITY

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

## BIOACCUMULATIVE POTENTIAL

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

## MOBILITY IN SOIL

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

## RESULTS OF PBT AND VPVB ASSESSMENT

Component:	Citric Acid, Monohydrate	CAS-No. 5949-29-1
<b>Results of PBT and vPvB assessment</b>		
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

<b>Additional ecological information</b>		
Result:	Do not flush into surface water or sanitary sewer system	

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**13 DISPOSAL CONSIDERATIONS**


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## 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.

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**14 TRANSPORT INFORMATION**


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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

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**15 REGULATORY INFORMATION**

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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

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**16 OTHER INFORMATION**

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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.