

# CITRIC ACID 30-33% (INHIBITED)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Reference number: 161161767  
Issue date: 11/10/2001 Revision date: 11/12/2024 Supersedes version of: 02/03/2023 Version: 4.0



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

#### 1.1. Product identifier

Product form : Mixture  
Product name : Citric Acid 30-33% (Inhibited)  
Product code : 161161767  
Type of product : Acid cleaning product: Scale and Iron rust remover  
Product group

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
Industrial/Professional use spec : For professional use only  
Industrial  
Function or use category : Cleaning/washing agents and additives

Title	Use descriptors
	SU3, PC35

Full text of use descriptors: see section 16

##### 1.2.2. Uses advised against

No additional information available

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

UNICLEAN CHEMICAL & GASES LTD - UNIMARINE GROUP  
PTOLEMEON 53  
3041 LIMASSOL  
CYPRUS  
T +35725331054  
[info@unimarine-services.com](mailto:info@unimarine-services.com)

#### 1.4. Emergency telephone number

Emergency number : +35725331054

### SECTION 2: Hazards identification

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

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious Eye Damage/Eye Irritation Category 2 H319

Full text of H- and EUH-statements: see section 16

##### Adverse physicochemical, human health and environmental effects

Causes serious eye damage.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



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## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



	GHS07
Signal word (CLP)	: Warning
Contains	: Citric Acid
Hazard statements (CLP)	: H319 - Causes serious eye irritation.
Precautionary statements (CLP)	: P280 - Wear protective gloves, protective clothing, eye protection, face protection. P264 – Wash all exposed external body areas thoroughly after handling. 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.

### 2.3. Other hazards

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Citric acid	CAS-No.: 77-92-9 EC No.: 201-069-1 Index No.: 607-750-00-3 REACH No.: Not available	30 – 33	Serious Eye Damage/Eye Irritation Category 2; H319

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell. Keep warm and rested
First-aid measures after skin contact	: Rinse skin with water/shower. Take off immediately all contaminated clothing. If skin burns appear, call a doctor immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Call a physician immediately. DO NOT attempt to neutralise the acid since exothermic reaction may extend the corrosive injury

# CITRIC ACID 30-33% (INHIBITED)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



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

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media suitable for surrounding area.
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### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: Non combustible.
Hazardous decomposition products in case of fire	: May emit corrosive, poisonous fumes. May emit acrid smoke. , carbon dioxide (CO <sub>2</sub> ) , other pyrolysis products typical of burning organic material. May emit poisonous fumes. May emit corrosive fumes.

### 5.3. Advice for firefighters

Precautionary measures fire	: Evacuate area.
Firefighting instructions	: Exercise caution when fighting any chemical fire. DO NOT approach containers suspected to be hot.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up	: Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Take up liquid spill into absorbent material. Contain and absorb spill with sand, earth, inert material or vermiculite
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

# CITRIC ACID 30-33% (INHIBITED)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe vapours. Wear personal protective equipment.
- Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep container closed when not in use. Keep cool.
- Incompatible products : Strong bases.
- Incompatible materials : Avoid reaction with oxidising agents.

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

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

Citric Acid (77-92-9)	
Occupational Exposure Banding	
Occupational Exposure Band Rating	E
Occupational Exposure Band Limit	$\leq 0.01 \text{ mg/m}^3$

##### 8.1.2. Recommended monitoring procedures

No additional information available

##### 8.1.3. Air contaminants formed

No additional information available

##### 8.1.4. DNEL and PNEC

No additional information available

##### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

##### 8.2.1. Appropriate engineering controls

###### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### 8.2.2. Personal protection equipment

###### Personal protective equipment symbol(s):



###### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses. Chemical goggles. Full face shield may be required for supplementary.

###### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing

# CITRIC ACID 30-33% (INHIBITED)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



### Hand protection:

protective gloves. Elbow length PVC gloves.

### 8.2.2.3. Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Yellow.
Appearance	: Yellow Liquid.
Odour	: Not available.
Odour threshold	: Not available
Melting point	: 0°C
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 1 – 2
Viscosity, kinematic	: Not available
Solubility	: Miscible.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 1.13 g/cm <sup>3</sup>
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with strong bases and oxidizing agents.

### 10.2. Chemical stability

Stable under normal conditions. Unstable in the presence of incompatible materials. Hazardous polymerisation will not occur.

# CITRIC ACID 30-33% (INHIBITED)

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



### 10.3. Possibility of hazardous reactions

Acids may react with metals to produce hydrogen, a highly flammable and explosive gas.

### 10.4. Conditions to avoid

Overheating.

### 10.5. Incompatible materials

Strong acids and oxidizing agents, metals

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Citric Acid 30-33% (Inhibited)

LD50 oral rat	3000 mg/kg
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#### Citric acid (77-92-9)

LD50 dermal (rat)	>2000 mg/kg
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LD50 oral (rat)	3000mg/kg
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Skin corrosion/irritation : Causes severe skin burns.  
pH: 1 – 2

#### Citric acid (77-92-9)

Skin (rabbit)	500 mg/24h - mild
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Skin	adverse effect observed (irritation)
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Eye	adverse effect observed (irritation)
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Eye (rabbit)	0.75 mg/24h- SEVERE
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Serious eye damage/irritation : Causes serious eye damage.  
pH: 1 – 2

Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified  
Reproductive toxicity : Not classified  
STOT-single exposure : Not classified.  
STOT-repeated exposure : Not classified  
Aspiration hazard : Not classified

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

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## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Citric acid (77-92-9)

LC50 – Fish	>100mg/l - 96 h
EC50 – Crustacea	>50mg/l - 48 h
EC50(ECx) – Crustacea	>50mg/l – 48h
EC50 – Algae or other aquatic plants	990mg/l – 72h

### 12.2. Persistence and degradability

#### Citric Acid 30-33% (Inhibited)

Persistence and degradability	This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
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### 12.3. Bioaccumulative potential

#### Citric acid (77-92-9)

Partition coefficient n-octanol/water (Log Pow)	-1,64
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### 12.4. Mobility in soil

#### Citric acid (77-92-9)

Partition coefficient n-octanol/water (Log KOC)	10
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### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste) : Disposal must be done according to official regulations.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

UN-No. (ADR)	: Not Applicable
UN-No. (IMDG)	: Not Applicable
UN-No. (IATA)	: Not Applicable
UN-No. (ADN)	: Not Applicable
UN-No. (RID)	: Not Applicable

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: Not Applicable
Proper Shipping Name (IMDG)	: Not Applicable
Proper Shipping Name (IATA)	: Not Applicable
Proper Shipping Name (ADN)	: Not Applicable

# CITRIC ACID 30-33% (INHIBITED)



## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Proper Shipping Name (RID)	: Not Applicable
Transport document description (ADR)	: Not Applicable
Transport document description (IMDG)	: Not Applicable
Transport document description (IATA)	: Not Applicable
Transport document description (ADN)	: Not Applicable
Transport document description (RID)	: Not Applicable

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: Not applicable
Danger labels (ADR)	: Not Applicable

#### IMDG

Transport hazard class(es) (IMDG)	: Not applicable
Danger labels (IMDG)	: Not applicable

#### IATA

Transport hazard class(es) (IATA)	: Not applicable
Danger labels (IATA)	: Not applicable

#### ADN

Transport hazard class(es) (ADN)	: Not applicable
Danger labels (ADN)	: Not applicable

#### RID

Transport hazard class(es) (RID)	: Not applicable
Danger labels (RID)	: Not applicable

### 14.4. Packing group

Packing group (ADR)	: Not applicable
Packing group (IMDG)	: Not applicable
Packing group (IATA)	: Not applicable
Packing group (ADN)	: Not applicable
Packing group (RID)	Not applicable

### 14.5. Environmental hazards

Dangerous for the environment	: No
Marine pollutant	: No
Other information	: No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Not applicable

#### Transport by sea

Not applicable

#### Air transport

Not applicable

#### Inland waterway transport

Not applicable

#### Rail transport

Not applicable

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878



### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

**Citric acid is found on the following regulatory lists:**

Europe EC Inventory

European Union - European Inventory of Existing Commercial Chemical Substances (EINECS)

European Union (EU) Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures - Annex VI

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - : Directives 98/24/EC, - 92/85/EEC, - 94/33/EC, - 2008/98/EC, - 2010/75/EU; Commission Regulation (EU) 2020/878; Regulation (EC) No 1272/2008 as updated through ATPs.

##### 15.1.2. National regulations

**Citric acid is found on the following inventory status**

Australia - AIIC / Australia Non-Industrial Use

Canada – DSL

China – IECSC

Europe - EINEC / ELINCS / NLP

Japan – ENCS

Korea – KECI

New Zealand – NZIoC

Philippines – PICCS

USA – TSCA

Taiwan – TCSI

Mexico – INSQ

Vietnam – NCI

Russia - FBEPH

#### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

#### Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H319	Causes serious eye irritation.

#### Full text of use descriptors

PC35	Washing and cleaning products
SU3	Industrial uses: Uses of substances as such or in preparations* at industrial sites

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.