

Safety data sheet

according to UK REACH and GB CLP

Revision 15.11.2021

Version number 5

Superseded version: No 3 /15.06.2017

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

1.1 Product identifier

Trade name: Citric Acid Anhydrous**CAS number:**

77-92-9

EC number:

201-069-1

DUIN number:

UK-20-5550930758-7-0000

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

Application of the substance / the preparation:

Intermediate

Formulation

Detergents and cleaning products

Agricultural applications

Personal care products

Paper industry

Construction products

Polymers and plastics

Oil industry

Textile industry

Paints and coatings

Photography products

Laboratory reagents

Water treatment

Treatment of metal surfaces

Medical devices

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

SHANDONG ENSIGN INDUSTRY CO.,LTD.

No.1567, Changsheng Street, Changle, Weifang, Shandong, China

Tel: +86-536-6298125

Fax: +86-536-6234587 ext. 8125

E-mail: sales@ensignworld.com

www.ensignworld.com

Further information obtainable from:

SUN RISING CONSULTANCY LONDON LIMITED

Suite 108 Chase Business Centre, 39-41 Chase Side, London

Tel: +0044 208 492 6388

Email: ukreach@jirehstandard.com

1.4 Emergency telephone number(s):

NHS Direct: 111

National Poisons Information Service (NPIS): 0121 507 4123 (healthcare professionals only).

Ireland - National Poisons Information Centre: 01 837 9964 or 01 809 2566 (healthcare professionals only).

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to GB CLP

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

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2.2 Label elements

Labelling according to GB CLP:

The substance is classified and labelled according to the GB CLP regulation.

Hazard pictograms:


GHS07

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.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear 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.

P312 Call a POISON CENTER/doctor if you feel unwell.

P337+P313 If eye irritation persists: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment
PBT: No PBT.

vPvB: No vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	CAS Number	EC Number	Content
Citric Acid Anhydrous	77-92-9	201-069-1	99.5%

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Move patient to fresh air, if symptoms persist consult a doctor.

After skin contact:

Immediately rinse with water.

If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Rinse out mouth and then drink plenty of water.

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Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Serious eye damage/eye irritation: Eye Irrit. 2

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Carbon dioxide (CO₂)

Carbon monoxide (CO)

5.3 Advice for firefighters

Protective equipment:

Wear fully protective suit.

Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

6.2 Environmental precautions

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up

Send for recovery or disposal in suitable receptacles.

Retrieve the product by mechanical means.

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well ventilated areas.

Provide suction extractors if dust is formed.

Do not inhale dust / smoke / mist.

Avoid contact with the eyes and skin.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in a cool, dry location in well sealed receptacles.

Provide ventilation for receptacles.

Store only in the original receptacle.

Information about storage in one common storage facility: Store away from oxidising agents.

7.3 Specific end use(s):

No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

PNECs	
PNEC	0.44 mg/L (Water (Freshwater)) 0.044 mg/L (Water (Marine Water)) >1000 mg/L (Sewage Treatment Plant (STP))
PNEC	3.46 mg/kg sedim. dw (Sediment (Marine Water)) 34.6 mg/kg sedim. dw (Sediment (Freshwater))
PNEC	33.1 mg/kg soil dw (Soil)

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Do not inhale dust / smoke / mist.
 Avoid contact with the eyes and skin.
 Wash hands before breaks and at the end of work.
 Do not eat, drink, smoke or sniff while working.

Respiratory protection: Suitable respiratory protective device recommended.

Hand protection



Protective gloves.

Material of gloves: Rubber, PVC or neoprene gloves recommended.

Eye/face protection



Safety goggles (EN 166).

Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Colour:	White.
Odour:	Odourless.
Odour threshold:	Not determined.
Melting point/freezing point:	153 °C
Boiling point or initial boiling point and boiling range	Decomposes before boiling
Flammability	Product is not flammable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.

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Decomposition temperature:	Not determined.
pH (100 g/l)	1.7
Viscosity:	
Kinematic viscosity	Not applicable.
VOC (EC):	
Dynamic:	Not applicable.
Solubility	
Water at 20 °C:	590 g/l
Partition coefficient n-octanol/water (log value)	-0.2 - -1.8 log Pow
Vapour pressure at 25 °C:	2.21*10 ⁻⁶ Pa
Density and/or relative density	
Density:	Not determined.
Relative density at 20 °C	1.665
Vapour density	Not applicable.

9.2 Other information

Appearance:**Form:**Solid.
Crystalline**Ignition temperature:**

Not applicable.

Explosive properties:

Product does not present an explosion hazard.

Softening point/range**Oxidising properties**

Not oxidising.

Evaporation rate

Not applicable.

Information with regard to physical hazard classes**Explosives**

Not applicable.

Flammable gases

Not applicable.

Aerosols

Not applicable.

Oxidising gases

Not applicable.

Gases under pressure

Not applicable.

Flammable liquids

Not applicable.

Flammable solids

Not applicable.

Self-reactive substances and mixtures

Not applicable.

Pyrophoric liquids

Not applicable.

Pyrophoric solids

Not applicable.

Self-heating substances and mixtures

Not applicable.

Substances and mixtures, which emit flammable**gases in contact with water**

Not applicable.

Oxidising liquids

Not applicable.

Oxidising solids

Not applicable.

Organic peroxides

Not applicable.

Corrosive to metals

Not applicable.

Desensitised explosives

Not applicable.

SECTION 10: Stability and reactivity

10.1 Reactivity No data available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: Stable at environment temperature.**10.3 Possibility of hazardous reactions** Reacts with alkali (lyes).**10.4 Conditions to avoid** Keep away from heat and direct sunlight.

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10.5 Incompatible materials

Protect from moisture.

Avoid strong oxidants, strong alkalis and strong acids.

10.6 Hazardous decomposition products

Carbon dioxide

Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in GB CLP

Acute toxicity Based on available data, the classification criteria are not met.

LD/LC₅₀ values:

Oral	LD ₅₀	5400 mg/Kg bw (Mouse) (OECD 401)
Dermal	LD ₅₀	>2000 mg/Kg bw (Rat) (OECD 402)

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Causes serious eye irritation.

Respiratory or skin sensitisation: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure:

May cause respiratory irritation.

STOT-repeated exposure: Based on available data, the classification criteria are not met.

Aspiration hazard: Based on available data, the classification criteria are not met.

Additional toxicological information:
CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Not mutagenic.

Not Carcinogenic.

Not toxic for reproduction.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

LC ₅₀ /48h	440 mg/L (Fish) (OECD 203)
NOEC	425 mg/L (Algae)
LC ₅₀ /24h	1535 mg/L (Daphnia Magna)

12.2 Persistence and degradability Easily biodegradable

12.3 Bioaccumulative potential Does not accumulate in organisms.

12.4 Mobility in soil pKa: 3.13, 4.76 and 6.4 at 25°C

12.5 Results of PBT and vPvB assessment

PBT: No PBT.

vPvB: No vPvB.

12.6 Endocrine disrupting properties

For information on endocrine disrupting properties see section 11.

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Trade name: Citric Acid Anhydrous**12.7 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation: Do not allow product to reach sewage system.**Uncleaned packaging:****Recommendation:**

Disposal must be made in accordance with official regulations.

Packaging that may not be cleansed must be disposed of in the same manner as the product.

SECTION 14: Transport information

14.1 UN number or ID number

ADR, ADN, IMDG, IATA Not applicable.

14.2 UN proper shipping name

ADR, ADN, IMDG, IATA Not applicable.

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA
Class Not applicable.

14.4 Packing group

ADR, IMDG, IATA Not applicable.

14.5 Environmental hazards

Marine pollutant: No**14.6 Special precautions for user** Not applicable.

14.7 Maritime transport in bulk according to

IMO instruments Not applicable.

SECTION 15: Regulatory information

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

This safety data sheet complies with the requirements of GB CLP.

15.2 Chemical safety assessment A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

*** Data compared to the previous version altered.**

H335 was added in section 2.