

Section 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier****Product name:** CITRIC ACID**REACH registered number(s):** 01-2119457026-42-XXXX**Product code:** CITA**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of substance / mixture:** Beverage Processing Aids and Other Usages**1.3. Details of the supplier of the safety data sheet****Company name:** Murphy and Son Ltd

Murphy & Son Ltd

Alpine St, Old Basford

Nottingham

NG6 0HQ

United Kingdom

Tel: (+44) 115 978 5494**Email:** technical@murphyandson.co.uk**1.4. Emergency telephone number****Emergency tel:** (+44) 115 978 5494

(office hours only)

Section 2: Hazards identification**2.1. Classification of the substance or mixture****Classification under CLP:** Skin Corr. 1C: H314**Most important adverse effects:** Causes severe skin burns and eye damage.**2.2. Label elements****Label elements:****Hazard statements:** H314: Causes severe skin burns and eye damage.**Hazard pictograms:** GHS05: Corrosion**Signal words:** Danger**Precautionary statements:** P260: Do not breathe dust.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

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P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water .

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.

2.3. Other hazards

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: CITRIC ACID ANHYDROUS POWDER

REACH registered number(s): 01-2119457026-42-XXXX

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.

Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning.

Eye contact: Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

Ingestion: Wash out mouth with water. Do not induce vomiting. Give 1 cup of water to drink every 10 minutes. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in the recovery position. If conscious, ensure the casualty sits or lies down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible.

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

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Eye bathing equipment should be available on the premises.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Corrosive. In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Notify the police and fire brigade immediately. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Do not create dust.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Clean-up should be dealt with only by qualified personnel familiar with the specific substance. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Do not handle in a confined space. Avoid the formation or spread of dust in the air.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed.

7.3. Specific end use(s)

Specific end use(s): No data available.

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Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures: Ensure there is sufficient ventilation of the area.

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency. Respiratory protective device with particle filter.

Hand protection: Protective gloves.

Eye protection: Tightly fitting safety goggles. Ensure eye bath is to hand.

Skin protection: Protective clothing.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Solid

Colour: White

Odour: Odourless

Evaporation rate: Not applicable.

Oxidising: Not applicable.

Solubility in water: Soluble

Also soluble in: Ethanol.

Viscosity: Not applicable.

Boiling point/range°C: Not applicable.

Flammability limits %: lower: Not applicable.

Flash point°C: Not applicable.

Autoflammability°C: Not applicable.

Relative density: 1.66 g/cm³

VOC g/l: Not applicable.

Melting point/range°C: 153@ 1013hPa

upper: Not applicable.

Part.coeff. n-octanol/water: -0.2 - 1.8 log K_{ow}

Vapour pressure: Not applicable.

pH: 1.7 (100g/l)

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

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10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Non-classified ingredients:

CITRIC ACID ANHYDROUS POWDER

| | | | | |
|-----|-----|------|------|-------|
| ORL | MUS | LD50 | 5040 | mg/kg |
| ORL | RAT | LD50 | 3 | gm/kg |
| SCU | RAT | LD50 | 5500 | mg/kg |

Relevant hazards for product:

| Hazard | Route | Basis |
|-------------------------------|-------|-----------------------|
| Skin corrosion/irritation | DRM | Hazardous: calculated |
| Serious eye damage/irritation | OPT | Hazardous: calculated |

Symptoms / routes of exposure

Skin contact: Blistering may occur. Progressive ulceration will occur if treatment is not immediate.

Eye contact: Corneal burns may occur. May cause permanent damage.

Ingestion: Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth or nose.

Inhalation: There may be shortness of breath with a burning sensation in the throat. Exposure may cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values: No data available.

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

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12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

Transport class: This product does not require a classification for transport.

Section 15: Regulatory information

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

Specific regulations: Not applicable.

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and s.3: H314: Causes severe skin burns and eye damage.

Legend to abbreviations: PNEC = predicted no effect concentration

DNEL = derived no effect level

LD50 = median lethal dose

LC50 = median lethal concentration

LDLO = lethal dose low

EC50 = median effective concentration

IC50 = median inhibitory concentration

[cont...]

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dw = dry weight

bw = body weight

cc = closed cup

oc = open cup

MUS = mouse

GPG = guinea pig

RBT = rabbit

HAM = hamster

HMN = human

MAM = mammal

PGN = pigeon

IVN = intravenous

IPR = intraperitoneal

SCU = subcutaneous

ORL = oral

SKN = skin

DRM = dermal

OCC = ocular/corneal

OPT = optical

ING = ingestion

INH = inhalation

PCP = physico-chemical properties

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.