

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name: **CITRIC ACID MONOHYDRATE**

CAS-No.: **5949-29-1**

Product Number: **R04065**

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

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,

UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

1.4 Emergency telephone number

Emergency Phone #: **+44 (0)845 1200 506**

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation (EC) No1272/2008; Serious eye damage (Category 1), Eye irritation (Category 2), Specific target organ toxicity - single exposure, Causes skin irritation (Category 2)

2.2 Label elements:

Pictogram



Signal word

Warning

Hazard statement(s): H318 Causes serious eye damage, H319 Causes serious eye irritation, H335 May cause respiratory irritation, H315 Causes skin irritation.

Precautionary statement(s): P264 Wash hands thoroughly after handling. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. P337 + P313 If eye irritation persists. Get medical advice/ attention.

2.3 Other hazards – This substance/ mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

2-Hydroxypropane-1,2,3-Tricarboxylic Acid

Formula: $C_6H_8O_7 \cdot H_2O$

Molecular Weight: 210.14

CAS-No.: 5949-29-1

EC-No.: 201-069-1

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact: Wash off with soap and plenty of water.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes.

If swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed: no data available

4.3 Indication of immediate medical attention and special treatment needed: no data available

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture: Carbon oxides

5.3 Precautions for fire-fighters: Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information: no data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

6.2 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up: Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections: For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling: Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities: Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end uses: no data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters: Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166.

Skin protection: The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

Body Protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- | | | |
|--------------------------------------------------|----------------------------------------|----------------------|
| a) Appearance: | Form: Crystalline | Colour: White |
| b) Odour: | no data available | |
| c) Odour Threshold: | no data available | |
| d) pH: | no data available | |
| e) Melting/freezing point: | Melting point/range: no data available | |
| f) Initial boiling point and boiling range: | no data available | |
| g) Flash point: | no data available | |
| h) Evaporation rate: | no data available | |
| i) Flammability (solid, gas): | no data available | |
| j) Upper/lower flammability or explosive limits: | no data available | |

- k) Vapour pressure: no data available
l) Vapour density: no data available
m) Relative density: no data available
n) Water solubility: no data available
o) Partition coefficient: n-octanol/water: no data available
p) Autoignition temperature: no data available
q) Decomposition temperature: no data available
r) Viscosity: no data available
s) Explosive properties: no data available
t) Oxidizing properties: no data available

9.2 Other safety information: no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity: no data available

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: no data available

10.4 Conditions to avoid: no data available

10.5 Incompatible materials: Strong oxidizing agents, Bases, Reducing agents, Nitrates,

10.6 Hazardous decomposition products: formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity: no data available

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Respiratory or skin sensitization: no data available

Germ cell mutagenicity: no data available

Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: no data available

Specific target organ toxicity - single exposure: no data available

Specific target organ toxicity - repeated exposure: no data available

Aspiration hazard: no data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity: no data available

12.2 Persistence and degradability: no data available

12.3 Bioaccumulative potential: no data available

12.4 Mobility in soil: no data available

12.5 Results of PBT and vPvB assessment: This substance/ mixture contains no components considered to be either persistent, bioaccumulative and toxic, or very persistent and very bioaccumulative

12.6 Other adverse effects:

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN-Number

ADR/RID: - IMDG: - IATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID:- IMDG: - IATA: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for users: no data available

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture: no data available

15.2 Chemical Safety Assessment: no data available

16. OTHER INFORMATION

H318 Causes serious eye damage

H319 Causes serious eye irritation

H335 May cause respiratory irritation

H315 Causes skin irritation