

4-Hydroxycinnamic acid

Cat#: orb104737 (MSDS)

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

1.1. Product identifier
Trade name
4-Hydroxycinnamic acid
CAS number
501-98-4
EC number
610-511-6
Synonyms
p-Coumaric acid

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

Research and development. **Not suitable for use in** Not suitable for human consumption or veterinary purposes.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Classification Acute toxicity, oral, hazard category 5 Skin irritation, hazard category 2 Eye irritation, hazard category 2 Specific Target Organ Toxicity — Single exposure, hazard category 3 Hazard statements H303, H315, H319, H335, H336

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 Hazard pictograms



Signal word Warning

Biorbyt Ltd

5 Orwell Furlong, Cowley Road, Cambridge, Cambridgeshire, CB4 0WY. United Kingdom Email: info@biorbyt.com | Phone: +44 (0)1223 859-353 | Fax: +44 (0)1223 280-240



Explore. Bioreagents.

Hazard statements

H303 May be harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

P261 Avoid breathing dust.

P264 Wash skin thoroughly after handling.

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

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

P302 + P352 IF ON SKIN: Wash with plenty of water/.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

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

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
trans-4-Hydroxycinnamic acid	501-98-4 610-511-6 - -	100%	Acute Tox. 5 - oral, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3	H303, H315, H319, H335 - -	-

Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measuresInhalationMove to fresh air if inhaled.Get medical attention if any discomfort continues.

Skin contact

Rinse skin with water.



If skin irritation or rash occurs: Get medical advice/attention.

Eye contact

Remove contact lenses if present. Rinse eyes with water. If eye irritation persists: Get medical advice/attention. Ingestion Rinse mouth. Get medical advice/attention if you feel unwell. Information for doctors

No data available.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation May cause respiratory irritation.

Skin contact

Prolonged contact may cause dryness of the skin.

Eye contact

May be slightly irritating to the eyes.

Ingestion

May cause discomfort if swallowed.

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

Treat symptomatically. No special treatment requirement.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

Unsuitable extinguishing media

No specific fire fighting procedure given.

5.2. Special hazards arising from the substance or mixture

Specific hazards: Combustible.

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Evacuate area. Avoid breathing gas, fume, vapours or spray. Cool containers exposed to heat with water spray and remove container, if no risk is involved.



Explore. Bioreagents. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No specific recommendations. For personal protection, see section 8.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Collect spillage with shovel, broom or the like and reuse, if possible. Dispose of large amounts of spillage/waste according to agreement with local authorities.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Store at room temperature. Store in a dry place. Store in a closed container.

7.3. Specific end use(s)

No specific usage precautions noted.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits No occupational exposure limit assigned.

8.2. Exposure controls

Eye / face protection

Wear eye protection.

Hand protection

Wear protective gloves. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Wash contaminated skin thoroughly after handling.

Other skin protection

Wash skin thoroughly after handling.

Biorbyt Ltd

5 Orwell Furlong, Cowley Road, Cambridge, Cambridgeshire, CB4 0WY. United Kingdom Email: info@biorbyt.com | Phone: +44 (0)1223 859-353 | Fax: +44 (0)1223 280-240



Explore. Bioreagents. **Respiratory protection** Provide adequate ventilation. **Environmental exposure controls** Avoid discharge into drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties **Physical state** Solid Colour Beige. Odour Odourless. Melting point / freezing point 214 - 217°C Boiling point or initial boiling point and boiling range No data available Flammability No data available Lower and upper explosion limit No data available **Flash point** No data available Auto-ignition temperature No data available **Decomposition temperature** No data available pН No data available **Kinematic viscosity** No data available Solubility No data available Partition coefficient n-octanol/water No data available Vapour pressure No data available Density and/or relative density No data available **Relative vapour density** No data available

Biorbyt Ltd

5 Orwell Furlong, Cowley Road, Cambridge, Cambridgeshire, CB4 0WY. United Kingdom Email: info@biorbyt.com | Phone: +44 (0)1223 859-353 | Fax: +44 (0)1223 280-240





Explore. Bioreagents. Particle characteristics No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The following applies in general to flammable organic substances and mixtures: when finely distributed, the risk of a dust explosion may be assumed.

10.2. Chemical stability

Stable under normal temperature conditions. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

There are no known conditions that are likely to result in a hazardous situation.

10.4. Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

See section 5.

SECTION 11: Toxicological information

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

Product / Substance name CAS / EC no.	Dose descriptor	Value / Dose	Test animals
trans-4-Hydroxycinnamic acid 501-98-4 / 610-511-6	Acute Toxicity (Oral LD50):	2850mg/kg	Mouse

Respiratory or skin sensitization

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

11.2. Information on other hazards No data available

SECTION 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 No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Dispose of contents/container in accordance with local regulations.

Biorbyt Ltd 5 Orwell Furlong, Cowley Road, Cambridge, Cambridgeshire, CB4 0WY. United Kingdom Email: info@biorbyt.com | Phone: +44 (0)1223 859-353 | Fax: +44 (0)1223 280-240



Explore. Bioreagents. SECTION 14: Transport information

www.biorbyt.com

14.1. UN number Not applicable

14.2. UN proper shipping name Not applicable

14.3. Transport hazard class(es) Not applicable

14.4. Packing group Not applicable

14.5. Environmental hazards Not applicable

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 EU regulations
 This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.
 National regulations
 No data available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Phrase meaning

Acute Tox. 5 - oral - Acute toxicity, oral, hazard category 5 Skin Irrit. 2 - Skin irritation, hazard category 2 Eye Irrit. 2 - Eye irritation, hazard category 2 STOT SE 3 - Specific Target Organ Toxicity — Single exposure, hazard category 3 H303 May be harmful if swallowed. H315 Causes skin irritation.

Biorbyt Ltd

5 Orwell Furlong, Cowley Road, Cambridge, Cambridgeshire, CB4 0WY. United Kingdom Email: info@biorbyt.com | Phone: +44 (0)1223 859-353 | Fax: +44 (0)1223 280-240 Biorbyt LLC 68 TW Alexander Drive, Durham, NC 27709. United States Email: info@biorbyt.com | Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558



H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

Biorbyt Ltd

5 Orwell Furlong, Cowley Road, Cambridge, Cambridgeshire, CB4 0WY. United Kingdom Email: info@biorbyt.com | Phone: +44 (0)1223 859-353 | Fax: +44 (0)1223 280-240 Biorbyt LLC 68 TW Alexander Drive, Durham, NC 27709. United States Email: info@biorbyt.com | Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558