

# SAFETY DATA SHEET



Create Date: 2020-07-12

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## SECTION 1: COMPANY AND PRODUCT INFORMATION

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### 1.1 Product identifiers

Product name : Caffeic Acid  
Cat. Number : ZXB-06-102  
CAS number : 331-39-5  
Synonyms : 3,4-Dihydroxycinnamic acid

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

Identified uses : For research and laboratory use only.

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

Address : Hinter den Gärten 56  
89173 Lonsee  
Deutschland  
Email : info@zellx.de  
Phone : +49(0)731 55211521  
Fax : +49(0)731 55211719

### 1.4 Emergency telephone number

Emergency phone : +49(0)731 55211521

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## SECTION 2: HAZARDS IDENTIFICATION

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### 2.1 Classification of substance or mixture

Skin Irritation (Category 2).  
Eye Irritation (Category 2A),  
Carcinogenicity (Category 2)  
Reproductive Toxicity (Category 2)  
Specific Target Organ Toxicity, Single Exposure (Category 3)

### 2.2 GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302.  
Serious eye damage (Category 1), H318.  
Acute aquatic toxicity (Category 3), H402.  
Chronic aquatic toxicity (Category 3), H412.

### 2.3 Label elements and precautionary statements

Pictogram : The image shows two GHS pictograms side-by-side. The first is a red diamond with a black silhouette of a person with a star on their chest, representing a health hazard. The second is a red diamond with a black exclamation mark, representing a warning.

Signal word : Warning

Hazard statement(s) : H315 - Causes skin irritation.  
H319 - Causes serious eye irritation.  
H335 - May cause respiratory irritation.  
H351 - Suspected of causing cancer.  
H361 - Suspected of damaging fertility or the unborn child.

Precautionary statement(s) : P201 - Obtain special instructions before use.  
P202 - Do not handle until all safety precautions have been read and understood.  
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.  
P264 - Wash skin thoroughly after handling.  
P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves/eye protection/face protection.  
P302+352 - IF ON SKIN: Wash with soap and water.  
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+313 - IF exposed or concerned: Get medical advice/attention.  
P321 - Specific treatment (see First Aid Measures on this label).  
P332+313 - If skin irritation occurs: Get medical advice/attention.  
P337+313 - If eye irritation persists get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P403+233 - Store in a well-ventilated place. Keep container tightly closed.  
P405 - Store locked up.  
P501 - Dispose of contents/container to an approved waste disposal plant.

#### 2.4 NFPA Rating

Health hazard : 2  
Fire hazard : 0  
Reactivity hazard : 0

#### 2.5 HMIS Rating

Health hazard : 2  
Chronic health hazard : -  
Flammability : 0  
Physical hazard : 0

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### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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#### 3.1 Substances

Substance	CAS#	EC#	Concentration
Caffeic Acid M.F: C <sub>9</sub> H <sub>8</sub> O <sub>4</sub> M.W: 180.16 g/mol	331-39-5	206-361-2	-

#### 3.2 Hazardous components & classification

Acute Tox. 4; Eye Dam. 1; Aquatic Acute 3; Aquatic Chronic 3; H302, H318, H412.

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## SECTION 4: FIRST AID MEASURES

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### 4.1 Description of first aid

#### measures General advice

Consult a physician if symptoms are severe or persistent. Provide this data sheet to medical personnel. If product is spilled or leaked, evacuate area.

#### In case of inhalation

If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Immediately wash skin copiously with soap and water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Immediately rinse out with water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

#### In case of ingestion

Wash out mouth with water. Drink plenty of water. Consult a physician. Never give anything by mouth to an unconscious person.

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

All known important symptoms are described in Section 2 and/or Section 11. No other important symptoms to report.

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

No special treatment indicated. Provide treatment in accordance with exhibited systems.

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## SECTION 5: FIRE FIGHTING MEASURES

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### 5.1 Conditions of flammability

Not flammable or combustible.

### 5.2 Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.3 Special hazards arising from the substance

During a fire, highly toxic gases may be generated by thermal decomposition or combustion  
- Carbon oxides.

### 5.4 Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

**For personal protection see section 8**

### 6.2 Environmental precautions

Do not let product enter drains.

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

Soak up with absorbent material, discard.

**For proper disposal see section 13**

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## SECTION 7: HANDLING AND STORAGE

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### 7.1 Precautions for safe handling

Always wear personal protective equipment.

**For precautions see section 2 & 8**

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

Storage conditions : Keep container tightly closed.  
Store at room temperature.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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### 8.1 Control parameters

This product is not known to contain any substances with occupational exposure limit values.

### 8.2 Engineering controls

This product is not known to contain any substances with occupational exposure limit values.

### 8.3 Personal protective equipment

Eye/face protection : Use only conforming to EN166 safety glasses with side-shields. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection : Use gloves when handling product. Inspect gloves before use to ensure suitability for use. Remove without exposing skin to the gloves outer surface. Discard used gloves according to all pertinent laws and/or current good practices (cGXP). Wash hands with soap and water. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Body protection : Wear appropriate clothing. Ensure clothing is in good condition, with no holes or tears. When selecting clothing, consider the concentration and amount of substance to be handled.

Respiratory protection : Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Information on basic physical and chemical properties

- a) Appearance : Light yellow
- b) Physical states : Solid (powder)
- c) Odor : Not available
- d) Odor threshold : Not available
- e) Melting point : 211-213°C
- f) Boiling point range : Not available
- g) Freezing point : Not available
- h) pH : Not available
- i) Density : Not available
- j) Flash point : Not available
- k) Evaporation rate : Not available
- l) Lower Explosion Limit : Not available
- m) Upper Explosion Limit : Not available
- n) Vapor pressure : Not available
- o) Vapor density : Not available
- p) Relative density : Not available
- q) solubility : Soluble in methanol
- r) Partition coefficient:  
n-octanol/water : Not available
- s) Autoignition temperature : Not available
- t) Decomposition temperature : Not available
- u) Viscosity : Not available

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## SECTION 10: STABILITY AND REACTIVITY

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### 10.1 Reactivity

No special reactivity is known.

### 10.2 Chemical stability

Product is stable when stored and used as recommended.

### 10.3 Condition to avoid

Incompatible materials.

### 10.4 Possibility of hazardous reactions

No hazardous reactions are known.

### 10.5 Incompatible materials

Strong oxidizing agents are incompatible with this product.

### 10.6 Hazardous decomposition products

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

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1 Acute toxicity

Oral : Rat-Tumorigenic:Carcinogenic by RTECS criteria.  
: Gastrointestinal:Tumors. Kidney, Ureter, Bladder:Kidney tumors

### 11.2 Skin corrosion/irritation

No skin/corrosion irritation data available.

### 11.3 Respiratory or skin sensitization

No sensitization data available.

### 11.4 Germ cell mutagenicity

Mouse; Lymphocyte; Mutation in mammalian somatic cells.

### 11.5 Carcinogenicity

**IARC** : 2B-Group 2B: Possibly carcinogenic to humans (3,4- Dihydroxycinnamic acid).

**ACGIH** : 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 ACGIH.

**NTP** : 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 NTP.

**OSHA** : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### 11.6 Reproductive toxicity

Possible risk of congenital malformation in the fetus.

Suspected human reproductive toxicant

Developmental Toxicity-rat-Intraperitoneal

Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

Specific Developmental Abnormalities: Musculoskeletal system.

### 11.7 Specific target organ toxicity – single exposure

Inhalation-May cause respiratory irritation.

### 11.8 Specific target organ toxicity – repeated exposure

No specific organ toxicity data available.

### 11.9 Aspiration hazard

No aspiration hazard data available.

### 11.10 Likely routes of exposure

Respiratory organs, mouth, skin, and eyes.

### 11.11 Symptoms of exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## SECTION 12: ECOLOGICAL INFORMATION

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**12.1 Toxicity**

No toxicity data available.

**12.2 Persistence and degradability**

Inherent biodegradability.

**12.3 Bioaccumulative potential**

Does not bioaccumulate.

**12.4 Mobility in soil**

No soil mobility data available.

**12.5 Other adverse effect**

None.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

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**13.1 Recommendation**

Dispose of product in accordance with local rules and regulations.

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**SECTION 14: TRANSPORTATION INFORMATION**

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**14.1 DOT (US)**

This material is considered to be non-hazardous for transport.

**14.2 IMDG**

This material is considered to be non-hazardous for transport.

**14.3 IATA**

This material is considered to be non-hazardous for transport.

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**SECTION 15: REGULATORY INFORMATION**

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**15.1 SARA**

SARA 302 Components

SARA 302: This product and components are not subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

SARA 311/312: Acute Health Hazard, Chronic Health Hazard

**15.2 Right to know components**

Massachusetts : Caffeic Acid Pure, CAS No.: 331-39-5

Pennsylvania : Caffeic Acid Pure, CAS No.: 331-39-5

New Jersey : Caffeic Acid Pure, CAS No.: 331-39-5

California  
proposition 65  
components : This product contains no chemicals which are known to the State of California to cause cancer, or birth defects or other reproductive defect.

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## SECTION 16: OTHER INFORMATION

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### 16.1 Disclaimer

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### 16.2 Preparation Information

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