

Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

Product name: Product code:

Product use: Restrictions on use:

Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200: WHMIS 2015:

Signal word:

Hazard Statement(s):

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Carcinogenicity [Category 2]

Warning!

None.

Causes skin irritation Causes serious eye irritation Suspected of causing cancer

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection.

If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention. If exposed or concerned: Get medical advice or attention. Store locked up.

Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified: [HNOC] Caffeic Acid C0002

For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number:

Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department:** TCI America Environmental Health Safety and Security +1- 503-286-7624 **TCI AMERICA**

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Components:	Caffeic Acid
Percent:	>98.0%(HPLC)(T)
CAS RN:	331-39-5
Molecular Weight:	180.16
Chemical Formula:	C9H8O4
Synonyms:	3,4-Dihydroxycinnamic Acid

4. FIRST-AID MEASURES

Description of first aid measures	
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention.
Ingestion:	Get medical advice/attention.Rinse mouth.
Symptoms/effects:	
Acute:	Redness.
Delayed:	Possibly carcinogenic to humans.

Indication of any immediate medical attention: Not available. Notes to physician: No data available

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Closed containers may explode from heat of a fire.
Advice for firefighters:	Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
7. HANDLING AND STORAGE	
Precautions for safe handling:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent
	dispersion of dust. Wash hands and face thoroughly after handling.
	Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated. Avoid all contact!
Conditions for safe storage, including a	ny incompatibilities
Storage conditions:	Keep container tightly closed. Store in a cool and dark place.
otorage contaitions.	Store locked up.
	Store away from incompatible materials such as oxidizing agents.
Packaging material:	Comply with laws.
Fachaging material.	Compry with laws.
8. EXPOSURE CONTROLS / PERSO	NAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath. Personal protective equipment Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations. Hand protection: Impervious gloves. Eye protection: Safety goggles. A face-shield, if the situation requires. Impervious protective clothing. Protective boots, if the situation requires.

Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold:	Solid Crystal - Powder Very pale yellow - Pale ye No data available No data available No data available	llow	
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic viscosity: Log Pow:	No data available No data available No data available No data available No data available No data available	pH: Vapour pressure: Vapour density: Dynamic Viscosity: Evaporation rate(Butyl Acetate=1):	No data available No data available. No data available No data available No data available
Flash point: Flammability(solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limits: Lower: Upper:	No data available No data available No data available
Solubility(ies): [Water] [Other solvents] Very soluble: Soluble: Very slightly soluble:	Slightly soluble Alcohols Ethyl acetate Chloroform, Hexane	opport	
10. STABILITY AND REACT	IVITY		
Reactivity: Chemical stability: Possibility of hazardous reactio Incompatible materials: Hazardous decomposition prod	Oxidizing agents, Strong b lucts: Carbon dioxide, Carbon m	een reported. ases	
11. TOXICOLOGICAL INFOR	RMATION		
RTECS Number: GD8950000			
Acute Toxicity: ipr-mus LD50:>721 mg/kg		ipr-rat LDLo:1500 mg/kg	
Skin corrosion/irritation: No data available			
Serious eye damage/irritation: No data available			
Respiratory or skin sensitization No data available	n:		
Germ cell mutagenicity: cyt-ham-ovr 200 mg/L		mrc-smc 300 mg/L	
Carcinogenicity: orl-mus TDLo:1613 g/kg/96W-C		orl-rat TDLo:728 g/kg/2Y-C	
IARC: Group 2B (Possibly to humans).	v carcinogenic NTP: No data	a available OSHA	: No data available
Reproductive toxicity: ipr-rat TDLo:480 mg/kg (5-12D pro	eg)		

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Ecotoxicity: Fish: Crustacea: Algae:	No data available No data available No data available
Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil	No data available 3.2
Log Pow: Soil adsorption (Koc):	0.82 100
Henry's Law (PaM ³/mol):	1.4 x 10 ⁻¹¹
13. DISPOSAL CONSIDERATIONS	
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.
Disposal of container:	Dispose of as unused product. Do not re-use empty containers.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATION	
DOT (US)	Non-hazardous for transportation.
IATA_	Non-hazardous for transportation.
IMDG	Non-hazardous for transportation.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

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US Federal Regulations

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	us substance and Re		
SARA 313:		Not Listed	
SARA 302:		Not Listed	
State Regulations	<u> </u>		
State Right-to-Kn	ow		
Massachuset	ts	Not Listed	
New Jersey		Not Listed	
Pennsylvania		Not Listed	
r ennsyrvania			
California Propos		Listed	
California Propos	ition 65:	Listed	
California Propos Other Information	ition 65:	Listed	HMIS Classification:
California Propos Other Information NFPA Rating:	ition 65:	Listed	HMIS Classification:
California Propos Other Information NFPA Rating: Health:	ition 65: 2	Listed	Health:
California Propos Other Information NFPA Rating:	ition 65:	Listed	
California Propos Other Information NFPA Rating: Health:	ition 65: 2	Listed	Health:
California Propos Other Information NFPA Rating: Health: Flammability: Instability:	ition 65: 0 0	Listed	Health: Flammability:
California Propos Other Information NFPA Rating: Health: Flammability: Instability: International Inve	ition 65: 0 0		Health: Flammability:
California Propos Other Information NFPA Rating: Health: Flammability: Instability:	ition 65: 0 0	Listed On DSL 206-361-2	Health: Flammability:

16. OTHER INFORMATION

Revision date: 07/06/2018 Revision number: 1

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.