



SAFETY DATA SHEET

According to JIS Z 7253:2019 Revision date 30-Jan-2023 Revision Number 2.02

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Chlorogenic Acid Hemihydrate
Product Code	033-14241,039-14243
Manufacturer	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-5964
Supplier	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-2029
Emergency telephone number Recommended uses and restrictions on use	+81-6-6203-3741 / +81-3-3270-8571 For research use only

Section 2: HAZARDS IDENTIFICATION

GHS classification Classification of the substance or mixture Skin corrosion/irritation Serious eye damage/eye irritation

Category 2 Category 2A

Pictograms



Warning

Hazard statements

- H315 Causes skin irritation
- H319 Causes serious eye irritation

Precautionary statements-(Prevention)

- · Wash face, hands and any exposed skin thoroughly after handling
- Wear protective gloves/protective clothing/eye protection/face protection

- Precautionary statements-(Response)
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsina
 - · If eye irritation persists: Get medical advice/attention
 - IF ON SKIN: Wash with plenty of soap and water
 - If skin irritation occurs: Get medical advice/attention
 - · Take off contaminated clothing and wash before reuse

Precautionary statements-(Storage)

- Not applicable
- Precautionary statements-(Disposal)
 - Not applicable

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Other hazards	Not a	vailable		
Sec	tion 3: COM	POSITION/INFOR	RMATION ON	INGREDIENTS
Single Substance or Mix	ture Subst	ance		
Formula	C16H18O9·0.5H2O			
Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.
Chlorogenic Acid	95.0	363.32	N/A	N/A
Note on ISHL No.:	* in th	e table means annound	ced chemical subst	ances.

Not applicable Impurities and/or Additives:

Section 4: FIRST AID MEASURES

Inhalation

Others

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eve contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO2), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Special extinguishing method

No information available

Special protective actions for

fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated. Methods and materials for contaminent and methods and materials for cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

Recoverly, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle In places other than those specified, should not be smoking or eating and drinking Should not be brought contaminated protective equipment and gloves to rest stops Deny unnecessary entry of non-emergency personnel to the handling area

Safety handling precautions

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

<u>Storage</u>

Safe storage conditions
Storage conditions

Incompatible substances

Safe packaging material

Keep container protect from light and tightly closed in well ventilated cool place under 25°C Glass Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and handand eye-wash facility. And display their position clearly.

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment Respiratory protection

Hand protection

Eye protection

Dust mask Protection gloves protective eyeglasses or chemical safety goggles Long-sleeved work clothes, protective boots

Skin and body protection General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form	
Color	White - slightly brown ,
Appearance	powder
Odor	no data available
Melting point/freezing point	210 °C (dec.)
Boiling point, initial boiling point and boiling range	no data available
Flammability	no data available
Evaporation rate:	no data available
Flammability (solid, gas):	no data available
Upper/lower flammability or	
explosive limits	
Upper:	no data available
Lower:	no data available
Flash point	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available

pH Viscosity (coefficient of viscosity) Dynamic viscosity Solubilities

n-Octanol/water partition coefficient:(log Pow) Vapour pressure Specific Gravity / Relative density Vapour density Particle characteristics no data available no data available no data available Ethanol : soluble . water and acetone : practically insoluble,or insoluble . no data available no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivityno data availableChemical stabilityMay be altered by light.Hazardous reactionsMay be altered by light.None under normal processingConditions to avoidConditions to avoidExtremes of temperature and direct sunlightIncompatible materialsStrong oxidizing agentsHazardous decomposition productsCarbon monooxide (CO), Carbon dioxide (CO2)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Skin irritation/corrosion Serious eye damage/ irritation Respiratory or skin sensitization Reproductive cell mutagenicity Carcinogenicity

Reproductive toxicity STOT-single exposure STOT-repeated exposure Aspiration hazard no data available

no data available no data available no data available no data available no data available

no data available no data available no data available no data available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

No information available

Other data

no data available

Persistence and degradability Bioaccumulative potential Mobility in soil Hazard to the ozone layer No information available No information available No information available No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group Marine pollutant	Not regulated - Not applicable
IMDG UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group Marine pollutant (Sea) Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated - Not applicable No information available
IATA UN number Proper shipping name: UN classfication Subsidiary hazard class Packing group Environmentally Hazardous Substance	Not regulated - Not applicable

Section 15: REGULATORY INFORMATION

International Inventories EINECS/ELINCS TSCA	Listed -	
Japanese regulations		
Fire Service Act	Not applicable	
Poisonous and Deleterious	Not applicable	
Substances Control Law		
Industrial Safety and Health Ac	tNot applicable	
Regulations for the carriage	Not applicable	
and storage of dangerous		
goods in ship		
Civil Aeronautics Law	Not applicable	
Pollutant Release and Transfer	Not applicable	
Register Law		
(~2023.3.31)		
Pollutant Release and Transfer	Not applicable	
<u>Register Law</u> (2023/4/1~)		
Export Trade Control Order	Not applicable	
Section 16: OTHER INFORMATION		
Key literature references and sources for data etc.	NITE: National Institute of Technology and Evaluation (JAPAN) http://www.safe.nite.go.jp/japan/db.html	

http://www.safe.nite.go.jp/japan/db.html IATA dangerous Goods Regulations RTECS:Registry of Toxic Effects of Chemical Substances Japan Industrial Safety and Health Association GHS Model SDS Dictionary of Synthetic Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd. Chemical Dictionary, Kyouritsu Publishing Co., Ltd. etc

Disclaimer

This SDS is according to JIS Z 7253: 2019. The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet