



SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 10/20/2005  
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Version 1.30

### Section 1 - Product and Company Information

Product Name **GALLIC ACID MONOHYDRATE, ACS**  
Product Number 48630  
Brand Fluka Chemical

Company Sigma-Aldrich  
Street Address 3050 Spruce Street  
City, State, Zip, Country SAINT LOUIS, MO 63103 US  
Technical Phone: 314 771 5765  
Fax: 800 325 5052

Emergency Phone: 414 273 3850 Ext. 5996

### Section 2 - Composition/Information on Ingredient

Substance Name	CAS #	SARA 313	EC no	Annex I Index Number
GALLIC ACID MONOHYDRATE	5995-86-8	No	205-749-9	

Formula  $C_7H_6O_5 \cdot H_2O$   
Synonyms Benzoic acid, 3,4,5-trihydroxy-, Kyselina gallova (Czech), Kyselina 3,4,5-trihydroxybenzoova (Czech), 3,4,5-Trihydroxybenzoic acid

### Section 3 - Hazards Identification

#### Emergency Overview

Irritant.  
Irritating to eyes, respiratory system and skin.

**HMIS Rating**  
Health: 2 Flammability: 0 Reactivity: 1

**NFPA Rating**  
Health: 2 Flammability: 0 Reactivity: 1

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Dermal Exposure

In case of contact, immediately wash skin with soap and copious amounts of water.

#### Eye Exposure

In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

### Section 5 - Fire Fighting Measures

Autoignition Temp: N/A

#### Extinguishing Media

##### Suitable

Water spray, Carbon dioxide, dry chemical powder, or appropriate foam.

#### Firefighting

##### Protective Equipment

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

##### Specific Hazard(s)

Emits toxic fumes under fire conditions.

### Section 6 - Accidental Release Measures

#### Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

### Section 7 - Handling and Storage

#### Handling

##### User Exposure

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### Storage

##### Suitable

Keep tightly closed.

#### Special Requirements

Hygroscopic. Light sensitive.

### Section 8 - Exposure Controls / PPE

#### Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

#### Personal Protective Equipment

##### Respiratory

Government approved respirator.

##### Hand

Compatible chemical-resistant gloves.

##### Eye

Chemical safety goggles.

#### General Hygiene Measures

Wash thoroughly after handling.

### Section 9 - Physical/Chemical Properties

#### Appearance

##### Physical State

Solid

##### Color

Faintly beige

##### Form

Crystalline

Fluka Chemical - 48630

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Molecular Weight: 188.14 AMU

pH N/A  
BP/BP Range N/A  
MP/MP Range 251 °C  
Freezing Point N/A  
Vapor Pressure N/A  
Vapor Density N/A  
Saturated Vapor Conc. N/A  
SG/Density N/A  
Bulk Density N/A  
Odor Threshold N/A  
Volatile% N/A  
VOC Content N/A  
Water Content N/A  
Solvent Content N/A  
Evaporation Rate N/A  
Viscosity N/A  
Partition Coefficient N/A  
Decomposition Temp. N/A  
Flash Point °F N/A  
Flash Point °C N/A  
Explosion Limits N/A

Flammability N/A  
Autoignition Temp N/A  
Solubility N/A

N/A = not available

## Section 10 - Stability and Reactivity

Stability  
Stable  
Stable.  
Conditions of Instability  
Hygroscopic. Light sensitive.  
Materials to Avoid  
Strong oxidizing agents, Strong bases, Acid chlorides, Acid anhydrides.

Hazardous Decomposition Products  
Hazardous Decomposition Products  
Carbon monoxide, Carbon dioxide.

Hazardous Polymerization  
Hazardous Polymerization  
Will not occur.

## Section 11 - Toxicological Information

Route of Exposure  
Skin Contact  
Causes skin irritation.  
Skin Absorption  
May be harmful if absorbed through the skin.  
Eye Contact  
Causes eye irritation.  
Inhalation  
Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

Ingestion  
May be harmful if swallowed.

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

RTECS Number: LW7525000

### Toxicity Data

Intraperitoneal - Mouse: 4300 MG/KG (LD50)

Intravenous - Mouse: 320 MG/KG (LD50)

Oral - Rabbit: 5000 mg/kg (LD50)

Remarks: Lungs, Thorax, or Respiration: Chronic pulmonary edema.

Liver: Other changes.

Kidney, Ureter, Bladder: Other changes.

### Chronic Exposure - Mutagen

Species	Dose	Route	Mutation test
Mouse	100 UMOL/KG	Intraperitoneal	Cytogenetic analysis
Hamster	50 MG/L	ovary	Cytogenetic analysis

### Chronic Exposure - Reproductive Hazard

Species	Dose	Route of Application	Exposure Time
Rat	5 MG/KG	Subcutaneous	(1D PRE)

Result: Maternal Effects: Ovaries, fallopian tubes.

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

### Appropriate Method of Disposal of Substance or Preparation

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.  
Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

### DOT

Proper Shipping Name: None

Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

### IATA

Non-Hazardous for Air Transport: Non-hazardous for air transport.

## Section 15 - Regulatory Information

### EU Additional Classification

Symbol of Danger: Xi

Indication of Danger

Irritant.

Risk Statements R: 36/37/38

Irritating to eyes, respiratory system and skin.

Safety Statements S: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

### US Classification and Label Text

Indication of Danger

Irritant.

**Risk Statements**

Irritating to eyes, respiratory system and skin.

**Safety Statements**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

**United States Regulatory Information**

**SARA Listed:** No

**TSCA Inventory Item:** Yes

**Canada Regulatory Information****WHMIS Classification**

This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

**DSL:** No

**NDSL:** No

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**Section 16 - Other Information**

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**Disclaimer**

For R&D use only. Not for drug, household or other uses.

**Warranty**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

