

## SAFETY DATA SHEET

Preparation Date: 04/29/2015

Revision date 11/28/2018

Revision Number: G2

### 1. Identification

#### Product identifier

**Product code:** G1003  
**Product Name:** GALLIC ACID, MONOHYDRATE, CRYSTAL, REAGENT, ACS

#### Other means of identification

**Synonyms:** 3,4,5-trihydroxybenzoic acid, monohydrate  
 Benzoic acid, 3,4,5-trihydroxy-, monohydrate  
**CAS #:** 5995-86-8  
**RTECS #** LW7525000 (RTECS no. for anhydrous form)  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** No information available.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Martin LaBenz (West Coast)  
**Contact Person:** Ibad Tirmiz (East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

#### Label elements

##### **Warning**

**Hazard statements**  
 Causes skin irritation  
 Causes serious eye irritation  
 May cause respiratory irritation

**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling

Avoid breathing dust/fume/gas/mist/vapors/spray

Use only outdoors or in a well-ventilated area

Wear protective gloves

Wear eye/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 rinsing. If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

**Precautionary Statements - Storage**

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

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula:	CAS No	Weight-%
Gallic Acid, monohydrate	5995-86-8	100

**4. FIRST AID MEASURES****First aid measures****General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:**

Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:**

Flush eyes with water for 15 minutes. Get medical attention.

**Inhalation:**

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

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**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Causes serious eye irritation  
Causes skin irritation  
Irritating to respiratory system  
Coughing  
Sneezing  
May cause digestive (gastrointestinal) tract irritation  
Ingestion may cause nausea, vomiting, and diarrhea

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:** Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray mist or foam.

**Unsuitable Extinguishing Media:** No information available.

**Specific hazards arising from the chemical**

**Hazardous combustion products** carbon oxides.

**Specific hazards:** May be combustible at high temperatures. When heated to decomposition it emits acrid smoke and irritating fumes.

**Special Protective Actions for Firefighters**

**Specific Methods:** No information available

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Use personal protective equipment. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid contact with skin, eyes and clothing. Remove all sources of ignition.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapors/dust. Do not ingest. Keep away from heat and sources of ignition. Protect from moisture. Protect from light. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Hygroscopic. Protect from moisture. Protect from light. Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container.

#### **Incompatible Materials:**

Strong oxidizing agents  
Strong bases  
Acid chlorides  
Acid anhydrides

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### National occupational exposure limits

##### United States

Formula:	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Gallic Acid, monohydrate	5995-86-8	None	None	None	None

##### Canada

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Formula:	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Gallic Acid, monohydrate	5995-86-8	None	None	None	None

### Australia and Mexico

Formula:	CAS No	Australia	Mexico
Gallic Acid, monohydrate	5995-86-8	None	None

### Appropriate engineering controls

#### Engineering measures to reduce exposure:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Goggles or Safety glasses with side-shields.

**Skin and body protection:** Long sleeved clothing  
Chemical resistant apron  
Gloves

**Respiratory protection:** Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:**  
Solid

**Appearance:**  
Fine crystalline powder. Powder.

**Color:**  
White. White to yellowish. Beige.  
Off-white.

**Odor:**  
Odorless.

**Taste**  
No information available.

**Formula:**  
C7H6O5-H2O

**Molecular/Formula weight (g/mole):**  
188.14 g/mol

**Flammability (solid, gas)**  
no data available

**Flashpoint (°C/°F):**  
No information available

**Flash Point Tested according to:**  
Not available

**Autoignition Temperature (°C/°F):**  
No information available

**Lower Explosion Limit (%):**  
No information available

**Upper Explosion Limit (%):**  
No information available

**Melting point/range(°C/°F):**  
250°C/ 482°F

**Decomposition temperature(°C/°F):**  
250-253 °C/482-487 °F

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**Boiling point/range(°C/°F):**

No information available

**Bulk density:**

No information available

**Density (g/cm3):**

No information available

**Specific gravity:**

No information available

**pH**

No information available

**Vapor pressure @ 20°C (kPa):**

No information available

**Evaporation rate:**

No information available

**Vapor density:**

No information available

**VOC content (g/L):**

No information available

**Odor threshold (ppm):**

No information available

**Partition coefficient (n-octanol/water):**

No information available

**Viscosity:**

No information available

**Miscibility:**

No information available

**Solubility:**

Partially soluble in cold water

Insoluble in Benzene

Insoluble in Chloroform

Insoluble in Petroleum ether

**10. STABILITY AND REACTIVITY****Reactivity**

Incompatible with acid chlorides, acid anhydrides, ferric salts, chlorates, permanganates, ammonia, lead acetate, alkali hydroxides, carbonates, silver salts, spirit nitrous ether. Reactive with strong oxidizing agents and strong bases

Reactive with oxidizing agents

Reacts with strong bases

**Chemical stability****Stability:**

Hygroscopic. Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:**

Heat. Product is sensitive to light and moisture. Exposure to moisture. Exposure to moist air. Exposure to light. Incompatible materials.

**Incompatible Materials:**

Strong oxidizing agents

Strong bases

Acid chlorides

Acid anhydrides

**Hazardous decomposition products:**

Carbon monoxide. Carbon dioxide.

**Other Information****Corrosivity:**

No information available

**Special Remarks on Corrosivity:** No information available

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure****Principal Routes of Exposure:**

Ingestion. Inhalation.

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## Acute Toxicity

### Component Information

Gallic Acid, monohydrate	
CAS No	5995-86-8

**LD50/oral/rat** = No information available  
**LD50/oral/mouse** = No information available  
**LD50/dermal/rabbit** = No information available  
**LD50/dermal/rat** = No information available  
**LC50/inhalation/rat** = No information available  
**LC50/inhalation/mouse** = No information available  
**Other LD50 or LC50 information** = 5000 mg/kg Oral LD50 Rabbit (anhydrous)

### Product Information

**LD50/oral/rat** =  
**Value** No information available

**LD50/oral/mouse** =  
**Value - Acute Tox Oral** = No information available

**LD50/dermal/rabbit**  
**Value** No information available

**LD50/dermal/rat**  
**VALUE -Acute Tox Dermal** = No information available

**LC50/inhalation/rat**  
**VALUE-Vapor** = No information available  
**VALUE-Gas** = No information available  
**VALUE-Dust/Mist** = No information available

**LC50/Inhalation/mouse**  
**VALUE-Vapor** = No information available  
**VALUE - Gas** = No information available  
**VALUE - Dust/Mist** = No information available

### Symptoms

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes eye irritation.

**Inhalation** Irritating to respiratory system. Symptoms may include coughing and sneezing.

**Ingestion** May cause digestive (gastrointestinal) tract irritation with nausea, vomiting, diarrhea. May affect the liver, urinary system, respiratory system ( chronic pulmonary edema).

**Aspiration hazard** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Chronic Toxicity** Prolonged or repeated ingestion may affect the blood (changes in red blood cell

count), liver, urinary system, spleen, and may cause weight loss.

**Sensitization:** No information available.

**Mutagenic Effects:** May affect genetic material  
Mutations in microorganisms  
Experiments with bacteria and/or yeast have shown mutagenic effects

**Carcinogenic effects:** Not considered carcinogenic.

Formula:	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Gallic Acid, monohydrate	5995-86-8	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** respiratory system.

**STOT - repeated exposure** No information available.

**Target Organs:** Blood. Kidneys. Liver. Respiratory system.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility in soil** No information available

**Other adverse effects** No information available.

## 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

**Waste from residues / unused products:**

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Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

Formula:	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Gallic Acid, monohydrate	5995-86-8	None	None	None	None

**14. TRANSPORT INFORMATION**

**DOT**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Class** No information available  
**Packing group:** No information available  
**Emergency Response Guide Number** No information available  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** No Information available  
**Symbol(s):** No information available  
**Description:** No information available

**TDG (Canada)**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No Information available  
**Description:** No information available

**ADR**

**UN Number** -  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Packing group** No information available  
**Subsidiary Risk:** No information available

**IMDG**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No information available

**RID**

**UN Number** Not Regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Subsidiary Risk:** No information available  
**Packing group** No information available

**ICAO (air)**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available

**IATA**

**UN Number** Not Regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Subsidiary Risk:** No information available  
**Packing group** No information available  
**Precautionary Statements - Response** IF exposed or concerned  
**Special Provisions** No information available

<b>15. REGULATORY INFORMATION</b>
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**International Inventories**

Formula:	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia AICS	EINECS-No.
<i>Gallic Acid, monohydrate</i>	5995-86-8	This material is exempt from TSCA 8(b) Inventory listing since it is a hydrate. However, the anhydrous form (CAS no. 149-91-7) is listed on the TSCA 8(b) Inventory	Not present	Present	Not present	Not listed	Not listed	Not present

**U.S. Regulations****California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.****Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Formula:	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Gallic Acid, monohydrate	5995-86-8	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Formula:	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
<i>Gallic Acid,</i>	5995-86-8	None	None	None	None	None

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monohydrate					
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## U.S. TSCA

Formula:	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Gallic Acid, monohydrate	5995-86-8	Not Applicable	Not Applicable

## Canada

### WHIMIS 2015 - GHS Classifications

WHIMIS 2015 Hazard Classification Information: The WHIMIS 2015 classification of this product has not been validated or reviewed yet.

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

### DSL/NDSL

Formula:	CAS No	Canada (DSL)	Canada (NDSL)
Gallic Acid, monohydrate	5995-86-8	Not Listed	Not Listed

Formula:	CAS No	CEPA Schedule I - Toxic Substances
Gallic Acid, monohydrate	5995-86-8	Not listed
Formula:	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Gallic Acid, monohydrate	5995-86-8	Not listed

### EU Classification

#### EU GHS - SV - CLP 1272/2008

Formula:	CAS No	EU GHS - SV - CLP (1272/2008)
Gallic Acid, monohydrate	5995-86-8	No information

#### EU - CLP (1272/2008)

### R-phrases(s)

R36/37/38 - Irritating to eyes, respiratory system and skin

### S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S37 - Wear suitable gloves

Formula:	CAS No	Classification	Concentration Limits:	Safety Phrases
Gallic Acid, monohydrate	5995-86-8	No information	No information	

**The product is classified in accordance with Annex VI to Directive 67/548/EEC**

### Indication of danger:

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Xi - Irritant

Xi



## 16. OTHER INFORMATION

**Preparation Date:** 04/29/2015  
**Revision date** 11/28/2018  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**