Dear Customer,

This File Contains Both The ANSI Material Safety Data Sheet and The GHS Safety Data Sheet For The Same Product

Spectrum is currently transitioning all chemical product labeling from the ANSI\(^1\) format to the GHS\(^2\) format (see note below). In order to ensure that you receive complete labeling during the transition, we have included both the ANSI MSDS and the GHS SDS in a single file. The ANSI MSDS is given first, followed by the GHS SDS. Please use whichever matches the container label.

**Why It Matters:**

The complete precautionary labeling for this chemical consists of BOTH the label on the container AND the matching Material Safety Data Sheet (for ANSI labels) or Safety Data Sheet (for GHS labels). Both elements of the labeling [Label + (M)SDS] are written to be read and understood together, so as to provide complete precautionary information. It is intended for you to read and understood BOTH before handling or using the chemical.

**Picking the Right One: 2 Easy Ways To Tell Whether Your Container Has an ANSI Label or a GHS Label**

1) GHS labels: any pictogram displayed in the upper left-hand corner will be inside a red diamond. ANSI labels: pictograms, if present, will be inside individual black boxes.

2) GHS labels: on the bottom of the right-hand panel of the label, locate the Lot Number. Directly to the left will be a string of control characters, followed by a single letter. For GHS labels, the string of characters will end in "GHS:"

---

[Image of a chemical label]

---

**CORPORATE OFFICES**

14422 South San Pedro Street
Gardena, California 90248
PHONE 310.516.8000
FAX 310.516.9843

AN ISO 9001:2008 REGISTERED COMPANY
Sincerely,

Regulatory Affairs
SAFETY DATA SHEET

Preparation Date: 04/29/2015  
Revision Date: 04/29/2015

Product identifier

Product code: G1004
Product Name: GALLIC ACID, PURIFIED

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 Chemicals and Laboratory Products, Inc.
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)

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 2A</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Label elements

Product code: G1004  
Product name: GALLIC ACID, PURIFIED
### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>5995-86-8</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**First aid measures**

**General Advice:** Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)

**Product code:** G1004  
**Product name:** GALLIC ACID, PURIFIED
4. FIRST AID MEASURES

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

Eye Contact: Flush eye 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.

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

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Indication of any immediate medical attention and special treatment needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Causes serious eye irritation. Causes skin irritation. May cause irritation of respiratory tract. Coughing. Sneezing. May cause digestive (gastrointestinal) tract irritation. Ingestion may cause nausea, vomiting, and diarrhea.</td>
<td>Notes to Physician: Treat symptomatically</td>
</tr>
</tbody>
</table>

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 (CO2). 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 decompositon 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 vapours/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**

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate - 5995-86-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Canada**

<table>
<thead>
<tr>
<th>Components</th>
<th>Alberta</th>
<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate - 5995-86-8</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Australia and Mexico**

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
</table>

**Product code:** G1004 **Product name:** GALLIC ACID, PURIFIED
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. Safety glasses with side-shields.

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

Respiratory protection: Effective dust mask. 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

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor:</td>
<td>Taste</td>
<td>Molecular/Formula weight:</td>
</tr>
<tr>
<td>Odorless.</td>
<td>No information available</td>
<td>188.14 g/mol</td>
</tr>
<tr>
<td>Formula:</td>
<td>Flash point (°C):</td>
<td>Flashpoint (°C/°F):</td>
</tr>
<tr>
<td>C7H6O5·H2O</td>
<td>No data available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point Tested according to:</td>
<td>Lower Explosion Limit (%):</td>
<td>Upper Explosion Limit (%):</td>
</tr>
<tr>
<td>Not available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C/°F):</td>
<td>pH:</td>
<td>Melting point/range(°C/°F):</td>
</tr>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>250°C/ 482°F</td>
</tr>
<tr>
<td>Boiling point/range(°C/°F):</td>
<td>Decomposition temperature(°C/°F):</td>
<td>Bulk density:</td>
</tr>
<tr>
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<td>250-253 °C/482-487 °F</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific gravity:</td>
<td>Vapor pressure @ 20°C (kPa):</td>
<td>Density (g/cm³):</td>
</tr>
<tr>
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<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Vapor density:</td>
<td>VOC content (g/L):</td>
</tr>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Odor threshold (ppm):</td>
<td>Partition coefficient (n-octanol/water):</td>
<td>Viscosity:</td>
</tr>
<tr>
<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
<tr>
<td>Miscibility:</td>
<td>Solubility:</td>
<td></td>
</tr>
<tr>
<td>No information available</td>
<td>Partially soluble in cold water</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insoluble in Benzene</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insoluble in Chloroform</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insoluble in Petroleum ether</td>
<td></td>
</tr>
<tr>
<td>Physical state:</td>
<td>Appearance:</td>
<td>Color:</td>
</tr>
<tr>
<td>Odor: Odorless.</td>
<td>Taste</td>
<td>Molecular/Formula weight:</td>
</tr>
<tr>
<td>Formula: C7H6O5·H2O</td>
<td>Flash point (°C):</td>
<td>Flashpoint (°C/°F):</td>
</tr>
<tr>
<td></td>
<td>No data available</td>
<td>No information available</td>
</tr>
<tr>
<td>Flash Point Tested according to:</td>
<td>Lower Explosion Limit (%):</td>
<td>Upper Explosion Limit (%):</td>
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<tr>
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<td>pH:</td>
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</tr>
<tr>
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<tr>
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</tr>
<tr>
<td></td>
<td>Insoluble in Benzene</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insoluble in Chloroform</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Insoluble in Petroleum ether</td>
<td></td>
</tr>
</tbody>
</table>

### 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 bases

**Chemical stability**

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

**Conditions to avoid:**

**Incompatible Materials:**

**Hazardous decomposition products:**
- Carbon monoxide. Carbon dioxide.

**Other Information**
- Corrosivity: No information available
- Special Remarks on Corrosivity: No information available

**Product code:** G1004  **Product name:** GALLIC ACID, PURIFIED
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

Gallic Acid, monohydrate - 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- Acute Tox Oral = No information available

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

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = 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
May cause respiratory tract irritation. 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

Product code: G1004 Product name: GALLIC ACID, PURIFIED
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

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

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
No information available

STOT - repeated exposure
No information available

Target Organs:

12. ECOLOGICAL INFORMATION

Ecotoxicity
Ecotoxicity effects:
No data available.

Persistence and degradability:
No information available

Bioaccumulative potential:
No information available

Mobility:
No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
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
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

**DOT**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Risk:** No information available
- **Packing Group:** None
- **ERG No:** No information available
- **Marine Pollutant:** No data available
- **DOT RQ (lbs):** 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
- **Description:** No information available

**ADR**
- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Packing Group:** No information available
- **Subsidiary Risk:** No information available
- **Classification Code:** No information available
- **Description:** No information available
- **CEFIC Tremcard No:** No information available

**IMO / 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
- **Description:** No information available
- **IMDG Page:** No information available
- **Marine Pollutant:** No information available
- **MFAG:** No information available
- **Maximum Quantity:** No information available

**RID**
- **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
- **Classification Code:** No information available
- **Description:** No information available

**Product code:** G1004  **Product name:** GALLIC ACID, PURIFIED
14. TRANSPORT INFORMATION

ICAO
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
Description: No information available

IATA
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
Description: No information available

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>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</td>
<td>Not present</td>
<td>Present</td>
<td>Not present</td>
<td>Not present</td>
<td>Not present</td>
<td>Not present</td>
</tr>
</tbody>
</table>

U.S. Regulations


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)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Product code: G1004  Product name: GALLIC ACID, PURIFIED
U.S. TSCA

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHMIS hazard class:
D2B  Toxic materials

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

EU Classification

R-phrase(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.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallic Acid, monohydrate</td>
<td></td>
<td>No information</td>
<td></td>
</tr>
</tbody>
</table>

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

Indication of danger:
Xi - Irritant.

Xi

16. OTHER INFORMATION
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
Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Gallic acid monohydrate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number(s)</td>
<td>G1003, G1004</td>
</tr>
<tr>
<td>CAS#</td>
<td>5995-86-8</td>
</tr>
<tr>
<td>RTECS</td>
<td>LW7525000 (RTECS no. for anhydrous form)</td>
</tr>
<tr>
<td>TSCA</td>
<td>TSCA 8(b) inventory: No products were found. 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.</td>
</tr>
<tr>
<td>CI#</td>
<td>Not available.</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
</tr>
<tr>
<td>Commercial Name(s)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Synonym</td>
<td>3,4,5-trihydroxybenzoic acid, monohydrate</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Benzoic acid, 3,4,5-trihydroxy-, monohydrate</td>
</tr>
<tr>
<td>Chemical Family</td>
<td>Not available.</td>
</tr>
<tr>
<td>Chemical Formula</td>
<td>C7-H6-O5.H2O</td>
</tr>
<tr>
<td>Supplier</td>
<td>SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248</td>
</tr>
</tbody>
</table>

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Gallic acid monohydrate</td>
<td>5995-86-8</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

Potential Acute Health Effects

Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
The substance may be toxic to blood, kidneys, liver, spleen, upper respiratory tract.
Repeated or prolonged exposure to the substance can produce target organs damage.
Section 4. First Aid Measures

**Eye Contact**
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact**
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Serious Skin Contact**
Not available.

**Inhalation**
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Serious Inhalation**
Not available.

**Ingestion**
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

**Serious Ingestion**
Not available.

Section 5. Fire and Explosion Data

**Flammability of the Product**
May be combustible at high temperature.

**Auto-Ignition Temperature**
Not available.

**Flash Points**
Not available.

**Flammable Limits**
Not available.

**Products of Combustion**
These products are carbon oxides (CO, CO2).

**Fire Hazards in Presence of Various Substances**
Slightly flammable to flammable in presence of heat.

**Explosion Hazards in Presence of Various Substances**
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.

**Fire Fighting Media and Instructions**
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Special Remarks on Fire Hazards**
When heated to decomposition it emits acrid smoke and irritating fumes.

**Special Remarks on Explosion Hazards**
Not available.

Section 6. Accidental Release Measures

**Small Spill**
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

**Large Spill**
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

**Precautions**
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, alkalis.

**Storage**

Continued on Next Page
## Section 8. Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineering Controls</strong></td>
<td>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.</td>
</tr>
<tr>
<td><strong>Personal Protection</strong></td>
<td>Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.</td>
</tr>
<tr>
<td><strong>Personal Protection in Case of a Large Spill</strong></td>
<td>Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.</td>
</tr>
<tr>
<td><strong>Exposure Limits</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

## Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state and appearance</strong></td>
<td>Solid. (Crystals solid. Powdered solid.)</td>
</tr>
<tr>
<td><strong>Molecular Weight</strong></td>
<td>188.14 g/mole</td>
</tr>
<tr>
<td><strong>pH (1% soln/water)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Boiling Point</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting Point</strong></td>
<td>Decomposition temperature: 251°C (483.8°F) - 252 C.</td>
</tr>
<tr>
<td><strong>Critical Temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific Gravity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor Pressure</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Vapor Density</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Volutility</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Water/Oil Dist. Coef.</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Ionicity (in Water)</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Dispersion Properties</strong></td>
<td>See solubility in water.</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Partially soluble in cold water.</td>
</tr>
</tbody>
</table>

## Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stability</strong></td>
<td>The product is stable.</td>
</tr>
<tr>
<td><strong>Instability Temperature</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Conditions of Instability</strong></td>
<td>Excess heat, incompatible materials, moisture</td>
</tr>
<tr>
<td><strong>Incompatibility with various substances</strong></td>
<td>Reactive with oxidizing agents, alkalis.</td>
</tr>
<tr>
<td><strong>Corrosivity</strong></td>
<td>Non-corrosive in presence of glass.</td>
</tr>
<tr>
<td><strong>Special Remarks on Reactivity</strong></td>
<td>Incompatible with acid chlorides, acid anhydrides, ferric salts, chlorates, permanganates, ammonia, Lead acetate, alkali hydroxides, carbonates, silver salts, spirit nitrous ether. Hygroscopic; keep container tightly closed. Sensitive to light. Protect from light and moisture</td>
</tr>
<tr>
<td><strong>Special Remarks on Corrosivity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Polymerization</strong></td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>

Continued on Next Page
**Section 11. Toxicological Information**

**Routes of Entry**
Inhalation. Ingestion.

**Toxicity to Animals**
Gallic acid, anhydrous (CAS no. 149-91-7):
Acute oral toxicity (LD50): 5000 mg/kg [Rabbit].

**Chronic Effects on Humans**
MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.
May cause damage to the following organs: blood, kidneys, liver, spleen, upper respiratory tract.

**Other Toxic Effects on Humans**
Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals**
Not available.

**Special Remarks on Chronic Effects on Humans**
May affect genetic material (mutagenic)

**Special Remarks on other Toxic Effects on Humans**
Acute Potential Health Effects:
Skin: May cause skin irritation.
Eyes: May cause eye irritation.
Inhalation: May cause respiratory tract irritation with 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).
Chronic Potential Health Effects:
Ingestion: Prolonged or repeated ingestion may affect the blood (changes in red blood cell count), liver, urinary system, spleen, and may cause weight loss.

**Section 12. Ecological Information**

**Ecotoxicity**
Not available.

**BOD5 and COD**
Not available.

**Products of Biodegradation**
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the Products of Biodegradation**
The product itself and its products of degradation are not toxic.

**Special Remarks on the Products of Biodegradation**
Not available.

**Section 13. Disposal Considerations**

**Waste Disposal**
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information**

**DOT Classification**
Not a DOT controlled material (United States).

**Identification**
Not applicable.

**Special Provisions for Transport**
Not applicable.

**DOT (Pictograms)**

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*Continued on Next Page*
Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations
No products were found.

California Proposition 65
Warnings
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations
EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances.
Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non- Domestic Substance List (NDSL).
China: Not listed on National Inventory.
Japan: Not listed on National Inventory (ENCS).
Korea: Not listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Not listed on AICS.

Other Classifications
<table>
<thead>
<tr>
<th>Classification</th>
<th>Canada</th>
<th>DSL (EEC)</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHMIS (Canada)</td>
<td>Not controlled under WHMIS (Canada).</td>
<td>Not available</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>DSCL (EEC)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HMIS (U.S.A.)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
<th>Pictogram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazard</td>
<td>1</td>
<td><img src="image" alt="Health Hazard" /></td>
</tr>
<tr>
<td>Fire Hazard</td>
<td>1</td>
<td><img src="image" alt="Fire Hazard" /></td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td><img src="image" alt="Reactivity" /></td>
</tr>
<tr>
<td>Personal Protection</td>
<td>E</td>
<td><img src="image" alt="Personal Protection" /></td>
</tr>
</tbody>
</table>

WHMIS (Canada) (Pictograms)

DSCL (Europe) (Pictograms)

TDG (Canada) (Pictograms)

ADR (Europe) (Pictograms)

Protective Equipment
- Gloves.
- Lab coat.
- Dust respirator. Be sure to use an approved/certified respirator or equivalent.
### Gallic acid monohydrate

Safety glasses.

### Section 16. Other Information

<table>
<thead>
<tr>
<th>MSDS Code</th>
<th>G3030</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Not available.</td>
</tr>
<tr>
<td>Other Special Considerations</td>
<td>Major Uses: In the manufacture of Gallic acid esters, Pyrogallol; in inks; as a photographic developer; in tanning; in dyeing; in testing free mineral acids</td>
</tr>
</tbody>
</table>

Validated by Sonia Owen on 7/8/2010.  
Verified by Sonia Owen.  

**Notice to Reader**

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