

Gallic Acid MSDS

1. Product Name and Identification

- **Product Name:** [Gallic Acid](#)
- **Chemical Formula:** C₇H₆O₅
- **CAS Number:** 149-91-7
- **Synonyms:** 3,4,5-Trihydroxybenzoic acid
- **Product Use:** Antioxidant, pharmaceutical intermediate, chemical reagent
- **Manufacturer Information:**
 - Company Name: [Insert Manufacturer's Name Here]
 - Address: [Insert Address Here]
 - Emergency Contact Number: [Insert Contact Number Here]

2. Composition/Ingredients

- **Chemical Name:** Gallic Acid
- **Concentration:** ≥ 98% (by weight)
- **Hazardous Components:**
 - None present that significantly impact hazard classification.

3. Hazards Identification

- **GHS Classification:**
 - Skin Irritation (Category 2)
 - Eye Irritation (Category 2A)
 - Acute Oral Toxicity (Category 5)
- **Label Elements:**
 - Signal Word: Warning
 - Hazard Statements:
 - H315 - Causes skin irritation.
 - H319 - Causes serious eye irritation.
 - H303 - May be harmful if swallowed.
 - Precautionary Statements:
 - P280 - Wear protective gloves and eye protection.
 - P302 + P352 - If on skin, wash with soap and water.
 - P305 + P351 + P338 - If in eyes, rinse cautiously with water for several minutes.
- **Other Hazards:**
 - Dust may cause mild respiratory irritation if inhaled in large quantities.

4. First Aid Measures

- **General Information:**
 - Provide this MSDS to healthcare professionals for reference. Seek medical advice for any prolonged symptoms.
- **Eye Contact:**
 - Immediately rinse with water for at least 15 minutes. Remove contact lenses if present and easy to do. Consult a physician if irritation persists.
- **Skin Contact:**
 - Wash skin thoroughly with soap and water. If irritation develops, seek medical attention.
- **Inhalation:**
 - Move to fresh air. If breathing difficulty occurs, seek medical attention immediately.
- **Ingestion:**
 - Rinse mouth with water. Give small amounts of water to drink. Do not induce vomiting unless directed by a medical professional. Seek medical assistance if symptoms develop.

5. Handling and Storage

- **Handling Instructions:**
 - Avoid creating dust during handling. Use adequate ventilation.
 - Wear appropriate personal protective equipment when working with the material.
 - Wash hands thoroughly after handling.
- **Storage Requirements:**
 - Store in a tightly-sealed container in a cool, dry, and well-ventilated area.
 - Keep away from incompatible materials, such as strong oxidizers and strong bases.

6. Exposure Controls/Personal Protection

- **Engineering Controls:**
 - Use local exhaust ventilation or enclosure during handling to control dust levels.
- **Personal Protective Equipment (PPE):**
 - **Eye Protection:**
 - Use safety goggles or chemical splash-resistant eye protection.
 - **Skin Protection:**
 - Wear gloves made of chemical-resistant material (e.g., nitrile, neoprene).
 - **Respiratory Protection:**
 - Use a particle-filtering respirator if dust concentrations exceed permissible exposure limits.
 - **General Hygiene:**
 - Do not eat, drink, or smoke in areas where the product is handled.

7. Physical and Chemical Properties

- **Appearance:** White to off-white crystalline powder
- **Odor:** Odorless
- **Melting Point:** ~250°C (decomposes)
- **Boiling Point:** Not applicable (decomposes before boiling)
- **Flash Point:** Not applicable
- **Solubility:** Soluble in hot water and alcohol; slightly soluble in cold water
- **Density:** ~1.69 g/cm³
- **pH (in solution):** 3.0-4.0
- **Vapor Pressure:** Negligible at room temperature

8. Stability and Reactivity

- **Chemical Stability:**
 - Stable under normal handling and storage conditions.
- **Conditions to Avoid:**
 - Avoid excessive heat, direct sunlight, and humid conditions.
- **Materials to Avoid:**
 - Strong oxidizing agents, strong bases, and reactive metals.
- **Hazardous Decomposition Products:**
 - Thermal decomposition may release CO, CO₂, and other toxic fumes.

9. Toxicological Information

- **Acute Toxicity:**
 - Oral (LD₅₀): ~5000 mg/kg (rat, estimated)
- **Skin Irritation:**
 - May cause redness and irritation on prolonged exposure.
- **Eye Irritation:**
 - Causes moderate to severe irritation upon direct contact.
- **Chronic Effects:**
 - Prolonged or repeated exposure to dust may cause mild respiratory irritation.
- **Carcinogenicity:**
 - Not classified as a carcinogen by OSHA, IARC, or NTP.

10. Disposal Considerations

- **Waste Disposal Instructions:**
 - Dispose of unused product in accordance with local, regional, and national regulations.
 - Do not dispose of the product into natural waterways or drains.
- **Empty Containers:**
 - Clean thoroughly before recycling or dispose of as per applicable regulations.