



## PYROGALLIC ACID CAS No.87-66-1

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### 1. Product Identification

**Synonyms:** 1,2,3-Trihydroxybenzene; pyrogallol; 1,2,3-benzenetriol

**CAS No.:** 87-66-1

**Molecular Weight:** 126.11

**Chemical Formula:** C<sub>6</sub>H<sub>3</sub>(OH)<sub>3</sub>

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### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Hazardous		
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Pyrogallol	87-66-1	100%
Yes		

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### 3. Hazards Identification

#### Emergency Overview

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**WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS THE RESPIRATORY SYSTEM, LIVER, KIDNEYS, EYES, SKIN AND BLOOD.**

**SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)**

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Health Rating: 2 - Moderate (Poison)

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate (Life)  
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES  
Storage Color Code: Blue (Health)

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## Potential Health Effects

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### **Inhalation:**

Irritant. May be absorbed through the lungs. Can cause coughing, sneezing or difficulty in breathing.

### **Ingestion:**

Ingestion can lead to severe gastrointestinal irritation, vomiting, and diarrhea. Pyrogalllic acid absorbed through the alimentary canal can cause damage to the liver and kidneys, produce methemoglobinemia, circulatory collapse and death.

### **Skin Contact:**

Irritant. Causes redness and soreness. Pyrogalllic acid is readily absorbed through the skin and severe or fatal poisoning can occur.

### **Eye Contact:**

Causes irritation with redness and pain.

### **Chronic Exposure:**

Accumulation of pyrogalllic acid in the system affects the kidneys and liver.

### **Aggravation of Pre-existing Conditions:**

Persons with pre-existing skin disorders or eye problems, or impaired liver, kidney or respiratory function may be more susceptible to the effects of the substance.

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## 4. First Aid Measures

### **Inhalation:**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

### **Ingestion:**

Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician immediately.

### **Skin Contact:**

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

### **Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

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## 5. Fire Fighting Measures

### **Fire:**

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

### **Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Water spray, dry chemical, alcohol foam, or carbon dioxide.

**Special Information:**

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

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## 6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container.

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## 7. Handling and Storage

Store in a cool, dry, ventilated area away from sources of heat or ignition. Isolate from oxidizing materials. Protect from direct sunlight. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

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## 8. Exposure Controls/Personal Protection

**Airborne Exposure Limits:**

None established.

**Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

**Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

**Skin Protection:**

Wear protective gloves and clean body-covering clothing.

**Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

**Appearance:**

White to slightly yellow plates and powder.

**Odor:**

Characteristic odor.

**Solubility:**

ca. 60g/100ml water @ 20C (68F).

**Density:**

1.45

**pH:**

No information found.

**% Volatiles by volume @ 21C (70F):**

0

**Boiling Point:**

309C (588F)

**Melting Point:**

131 - 133C (268 - 271F)

**Vapor Density (Air=1):**

4.4

**Vapor Pressure (mm Hg):**

10 @ 167.7C (334F)

**Evaporation Rate (BuAc=1):**

No information found.

## 10. Stability and Reactivity

**Stability:**

Stable under ordinary conditions of use and storage. Darkens on exposure to air or light.

**Hazardous Decomposition Products:**

Carbon dioxide and carbon monoxide may form when heated to decomposition.

**Hazardous Polymerization:**

Will not occur.

**Incompatibilities:**

Oxygen, oxidizing agents, alkalis, ammonia, iodine, iron and lead salts, and phenol.

**Conditions to Avoid:**

Air, heat, and light.

## 11. Toxicological Information

Oral rat LD50: 789 mg/kg. Irritation skin rabbit: 2mg/kg/24H severe. Eye rabbit: 20 mg/24H severe. Investigated as a mutagen, tumorigen, and reproductive effector.

Ingredient Category	---NTP Carcinogen---		IARC
	Known	Anticipated	
Pyrogallol (87-66-1)	No	No	None

## 12. Ecological Information

### Environmental Fate:

No information found.

### Environmental Toxicity:

This material is expected to be very toxic to aquatic life. TLm/18ppm/48hr/goldfish/fresh water.

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## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

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## 14. Transport Information

### Domestic (Land, D.O.T.)

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**Proper Shipping Name:** TOXIC SOLIDS, ORGANIC, N.O.S. (PYROGALLIC ACID)

**Hazard Class:** 6.1

**UN/NA:** UN2811

**Packing Group:** III

**Information reported for product/size:** 500G

### International (Water, I.M.O.)

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**Proper Shipping Name:** TOXIC SOLIDS, ORGANIC, N.O.S. (PYROGALLIC ACID)

**Hazard Class:** 6.1

**UN/NA:** UN2811

**Packing Group:** III

**Information reported for product/size:** 500G

### International (Air, I.C.A.O.)

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**Proper Shipping Name:** TOXIC SOLIDS, ORGANIC, N.O.S. (PYROGALLIC ACID)

**Hazard Class:** 6.1

**UN/NA:** UN2811

**Packing Group:** III

**Information reported for product/size:** 500G

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## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----  
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Ingredient TSCA EC Japan  
Australia  
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Pyrogallol (87-66-1) Yes Yes Yes Yes

-----\Chemical Inventory Status - Part 2\-----

-----\Canada-----  
Ingredient Korea DSL NDSL Phil.  
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Pyrogallol (87-66-1) Yes Yes No Yes

-----\Federal, State & International Regulations - Part 1\-----

-----SARA 302-----SARA 313-----  
Ingredient RQ TPQ List Chemical  
Catg. -----  
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Pyrogallol (87-66-1) No No No No

-----\Federal, State & International Regulations - Part 2\-----

-----RCRA-----TSCA-----  
Ingredient CERCLA 261.33 8(d)  
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Pyrogallol (87-66-1) No No No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No  
Reactivity: No (Pure / Solid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

**WHMIS:**

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

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## 16. Other Information

**NFPA Ratings:** Health: **3** Flammability: **1** Reactivity: **0**

**Label Hazard Warning:**

WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN.  
CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS THE  
RESPIRATORY SYSTEM, LIVER, KIDNEYS, EYES, SKIN AND BLOOD.

**Label Precautions:**

- Do not breathe dust.
- Do not get in eyes, on skin, or on clothing.
- Keep container closed.
- Use with adequate ventilation.
- Wash thoroughly after handling.

**Label First Aid:**

If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing,

give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. In all cases call a physician.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 14.

**Disclaimer:**

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