

# Propyl Gallate MSDS

## Product Name and Identification

- **Product Name:** [Propyl Gallate](#)
- **Chemical Formula:** C<sub>10</sub>H<sub>12</sub>O<sub>5</sub>
- **CAS Number:** 121-79-9
- **Relevant Uses:** Antioxidant used in food, cosmetics, and industrial applications to prevent oxidation and rancidity.
- **Manufacturer/Supplier:** [Insert Manufacturer Information]
- **Emergency Contact Number:** [Insert Emergency Contact Information]

## Composition/Ingredients

- **Chemical Name:** Propyl Gallate
- **Concentration:** 98-100%
- **Synonyms:** Propyl 3,4,5-trihydroxybenzoate
- **CAS Number:** 121-79-9
- **EC Number:** 204-498-2

## Hazards Identification

- **Classification:**
  - Skin irritation (Category 2)
  - Eye irritation (Category 2A)
  - Specific target organ toxicity - single exposure (Category 3, respiratory irritation)
- **Hazard Statements:**
  - H315: Causes skin irritation.
  - H319: Causes serious eye irritation.
  - H335: May cause respiratory irritation.
- **Precautionary Statements:**
  - P261: Avoid breathing dust or fumes.
  - P280: Wear protective gloves, clothing, and eye protection.
  - P303 + P361 + P353: IF ON SKIN, remove contaminated clothing and rinse skin with water.
  - P305 + P351 + P338: IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

## First Aid Measures

- **General Advice:**
  - Seek medical attention if adverse symptoms persist after exposure.
- **If Inhaled:**

- Move the person to fresh air. Keep them comfortable for breathing. Call a doctor if symptoms like coughing or irritation persist.
- **If on Skin:**
  - Wash with soap and water for at least 15 minutes. Remove contaminated clothing. If irritation persists, consult a physician.
- **If in Eyes:**
  - Immediately flush eyes with water for at least 15 minutes. Remove contact lenses if applicable. Seek medical advice if irritation persists.
- **If Swallowed:**
  - Rinse mouth with water. Do not induce vomiting. Seek medical attention immediately.

## Handling and Storage

- **Handling:**
  - Avoid breathing dust or vapors. Use in a well-ventilated area or under local exhaust ventilation. Prevent contact with skin or eyes.
  - Minimize dust generation and accumulation.
- **Storage:**
  - Store in a cool, dry area, away from heat and ignition sources. Keep container tightly sealed. Avoid exposure to moisture and strong oxidizers.

## Exposure Controls/Personal Protection

- **Exposure Limits:**
  - No exposure limits established. Use standard industrial controls to minimize inhalation or contact.
- **Engineering Controls:**
  - Use local exhaust ventilation to maintain exposure below permissible levels.
- **Personal Protective Equipment (PPE):**
  - **Eye Protection:**
    - Wear chemical safety goggles or a face shield.
  - **Skin Protection:**
    - Use chemical-resistant gloves and suitable protective clothing.
  - **Respiratory Protection:**
    - Use an approved respirator if dust levels are high or ventilation inadequate.
  - **General Hygiene:**
    - Wash hands and skin thoroughly after handling. Avoid eating, drinking, or smoking in work areas.

## Physical and Chemical Properties

- **Appearance:** White to slightly yellow crystalline powder
- **Odor:** Odorless or faint characteristic odor

- **pH** (10% solution): ~4-5
- **Melting Point:** 150-153°C
- **Solubility:**
  - Slightly soluble in water (~0.1 g/L at 25°C).
  - Soluble in ethanol, acetone, and oils.
- **Boiling Point:** Decomposes before boiling
- **Flash Point:** Not applicable
- **Density** (at 20°C): ~1.4 g/cm<sup>3</sup>

## Stability and Reactivity

- **Stability:**
  - Stable under recommended storage and handling conditions.
- **Reactivity:**
  - Reacts with strong oxidizing agents and bases.
- **Conditions to Avoid:**
  - Heat, moisture, and prolonged exposure to air.
- **Hazardous Decomposition Products:**
  - Emits carbon monoxide, carbon dioxide, and other potentially toxic gases upon combustion or decomposition.

## Toxicological Information

- **Acute Toxicity:**
  - Oral LD50 (rat): ~3800 mg/kg
  - Dermal LD50 (rabbit): >2000 mg/kg
- **Skin Irritation:**
  - May cause mild to moderate irritation on direct contact.
- **Eye Damage:**
  - Causes irritation, redness, or watering.
- **Respiratory Effects:**
  - Dust inhalation may cause mild irritation to the respiratory tract.
- **Chronic Effects:**
  - Prolonged or repeated exposure may cause skin sensitization in some individuals.

## Disposal Considerations

- **Waste Treatment Methods:**
  - Dispose of according to local, regional, and national regulations. Avoid disposal into drains or water sources.
- **Packaging:**
  - Dispose of contaminated packaging as hazardous waste or recycle after proper cleaning according to local guidelines.